

# DOE Super ESPC Delivery Order Guidelines

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**U.S. Department of Energy** 

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# **Abbreviations and Acronyms**

BAMF Biomass and Alternative Methane Fuels
CHP Combined cooling, heating, and power

CICA Competition in Contracting Act

CO Contracting Officer

COR DOE Contracting Officer's Representative

DES Detailed energy survey
DG Distributed generation

DO Delivery order

DO RFP Delivery order request for proposal

DOE U.S. Department of Energy
DOE CO DOE Contracting Officer
DOE PM DOE Program Manager

ECM Energy-conservation measure
EPACT Energy Policy Act of 1992
ESCO Energy services company

ESPC Energy savings performance contract(ing)

FAR Federal Acquisition Regulation

FASA Federal Acquisition Streamlining Act

FEMP DOE Federal Energy Management Program

FY Fiscal year

GHP Geothermal heat pump

HVAC Heating, ventilating, and air conditioning

IAA Interagency agreement

IDIQ Indefinite-delivery, indefinite-quantity (contract)

M&O Management and operating (contractor)

M&V Measurement and verification

NOI Notice of Intent to Award

O&M Operations and maintenance

PF Project facilitator

PM DOE Program Manager

PV Photovoltaics

RFP Request for proposal
RO (DOE) Regional Office
R&R Repair and replacement

SDP Site data package

STR Site Technical Representative

USC United States Code

Super ESPC Delivery Order Guidelines				

## Introduction

The U.S. Department of Energy (DOE) Federal Energy Management Program (FEMP) is pleased to publish version 3.04 of the *Super ESPC Delivery Order Guidelines*, a guide to process and resources for government organizations that are using DOE's Super ESPCs.

This document is a user-friendly introduction to Super ESPCs, as well as an index to the many resources available to help federal agencies with their energy projects. These resources are helping agencies to develop technically excellent energy projects that are saving energy and money, improving energy security, and enhancing their organizations' missions.

The first section of the *Guidelines* is an introduction to Super ESPCs that covers the basics: where to find primary sources of help and information, the scope of the contracts, and notable characteristics of the contracts.

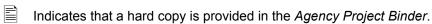
The rest of the *Guidelines* contains a step-by-step description of the process of awarding a Super ESPC delivery order, from the early, exploratory steps, through project acceptance, to contract closeout.

The Guidelines is used in two forms, as:

- a stand-alone document, and
- part of the Agency Project Binder—Super ESPC Best Practices, Tools, and Resources.

The Agency Project Binder contains all of the tools and resources that FEMP has developed to help agencies accomplish their Super ESPC projects — sample contract documents, checklists, templates, and guidance. This binder is provided to agency personnel who attend FEMP's Super ESPC workshops and to others who request it. The main sections of the Guidelines are included in the corresponding sections of the binder.

In the *Guidelines*, the tools and resources contained in the *Agency Project Binder* are called out by means of two symbols:





Indicates that the resource is available on the FEMP web site.

All the tools and resources in the *Agency Project Binder* and the *Guidelines* are posted on or linked from FEMP's web site, at <a href="https://www.eere.energy.gov/femp/financing/espc/contract\_tools">www.eere.energy.gov/femp/financing/espc/contract\_tools</a>.

Super ESPC Delivery Order Guidelines				

## **ESPC Basics**

## 1. Primary Super ESPC Resources and Guidance

Federal Energy Management Program (FEMP) provides resources and services to help agencies develop energy projects. Several sources of help and information are highlighted below.

#### • FEMP Web Site: www.eere.energy.gov/femp/financing/espc.html

The FEMP web site offers information on energy service companies (ESCOs), contract tools and guidance, Super ESPC awards to date, case studies, and many other subjects. All of the tools and resources mentioned in this document are available from the "Contract Tools" pages of the web site, except where noted.

#### Assistance Available from FEMP Services

www.eere.energy.gov/femp/financing/espc/fempassistance.htm

FEMP actively supports agencies developing Super ESPC projects by providing technical expertise, contracting assistance, information, and tools. FEMP's assistance is designed to help agencies develop Super ESPC projects that are technically excellent, contractually and legally sound, and financially smart. The web sites listed below offer information about FEMP services.

#### Project Facilitation

www.eere.energy.gov/femp/financing/espc/project\_facilitation.html

A FEMP Project Facilitator can be assigned by the DOE Regional Office to provide expert assistance and guide the agency through the entire Super ESPC process. See Basics 4.3 and Phase 1.4 - 1.7 for more information on project facilitation services.

#### Technical Assistance

www.eere.energy.gov/femp/techassist.html

FEMP's technical assistance programs address many aspects of energy and water efficiency and renewable energy. Technical assistance is available to all federal organizations, however big or small their energy improvement projects

#### • Super ESPC Delivery Order Workshops

www.eere.energy.gov/femp/resources/training/fy2004\_super\_espc.html

FEMP's Super ESPC training is highly recommended for bringing agency acquisition teams up the learning curve quickly. Workshops are offered at several locations around the country each year.

#### FEMP Representatives in the DOE Regional Offices

www.eere.energy.gov/femp/financing/espc/getting\_started.html

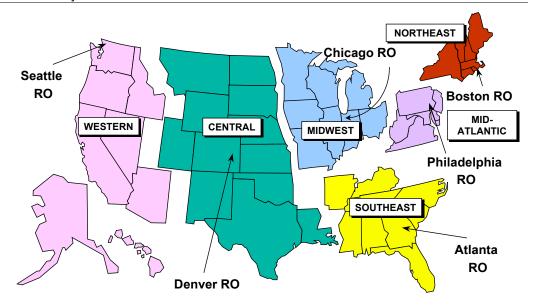
FEMP's reps in the DOE Regional Offices are dedicated to providing support to agencies who are striving to achieve their energy goals. The web site always has current contact information for FEMP's representatives in the DOE Regional Offices, who can help you get started. (See map of DOE regions on the following page.)

#### • The DOE Super ESPC IDIQ Contract



www.eere.energy.gov/femp/financing/pdfs/idig 0501.pdf

Super ESPC indefinite-delivery, indefinite-quantity (IDIQ) contracts are a definitive source of information. It is essential for agencies to understand what is in the contract.



DOE Regional Office (RO) locations are shown above. For current contact information for the FEMP rep in your region, go to www.eere.energy.gov/femp/financing/espc/getting started.html

#### • The Practical Guide to Savings and Payments in Super ESPCs



www.eere.energy.gov/femp/financing/espc/practical\_guide.html

The Practical Guide to Savings and Payments in Super ESPC Delivery Orders is the companion to the Super ESPC Delivery Order Guidelines. Understanding the kinds of savings that may be accounted for and used to pay the contractor is critical to taking full advantage of the leveraging power of ESPCs. The Practical Guide explains the financial structure of Super ESPCs and the statutes and rules that define allowable savings and payments.

## FEMP Measurement & Verification (M&V) Guidelines



www.eere.energy.gov/femp/financing/espc/measguide.html

The FEMP M&V Guidelines details M&V requirements for Super ESPCs. 🖹 There is also a section on M&V in the Agency Project Binder.

#### 2. What is Energy Savings Performance Contracting?

Energy savings performance contracting (ESPC) is a contracting vehicle that allows federal agencies to accomplish energy projects for their facilities without depending on special appropriations to pay for the improvements. An ESPC project is a partnership between the customer (a government organization) and an energy service company (ESCO). The ESCO conducts a comprehensive energy audit and identifies improvements that will save energy and reduce utility bills at the facility. The ESCO designs and constructs a project that meets the agency's needs and arranges financing to pay for it.

The ESCO guarantees that installed energy conservation measures (ECMs) will result in a specified level of cost savings to the federal customer, which will be sufficient to pay the ESCO for the project. The agency uses the guaranteed cost savings to pay for building improvements over the life of the contract. After the contract ends, all additional cost savings accrue to the agency.

#### 2.1 Federal ESPC Authority

Federal agencies' use of ESPCs is authorized and encouraged by a series of legislation and executive orders.

The ESPC authority was first enacted in the National Energy Conservation Policy Act (NECPA), by means of amendment by the Consolidated Omnibus Budget Reconciliation Act of 1985 (P.L. 99-272). This act added Title VIII to NECPA, which gave federal agencies the authority to enter into shared-energy-savings contracts with private-sector ESCOs.

The Energy Policy Act of 1992 (EPAct) further amended NECPA to authorize federal agencies to execute guaranteed-savings contracts, or ESPCs, with private-sector ESCOs.

EPAct (Public Law 102-486) directed DOE to develop an ESPC regulation through a formal rulemaking process. The final ESPC rule was published on April 10, 1995, as part of the Department of Energy Acquisition Regulation (DEAR) at 10 CRF Part 436 Subpart B.

Although ESPCs must comply with the Federal Acquisition Regulation's (FAR) solicitation and competition requirements, if the two conflict, EPACT and the DOE Rule take precedence over the FAR.

Executive Order 13123, June 3, 1999, defines requirements for agencies to meet specific energy goals, and strongly supports the use of alternative financing methods, including ESPCs, to achieve them:

#### E.O. 13123, Section 402: Financing Mechanisms

Agencies shall maximize their use of available alternative financing contracting methods, including Energy Savings Performance Contracts...

The authorization for federal agencies to enter into ESPCs specifies that savings guarantees are mandatory and that M&V will be used to verify that the guaranteed savings are realized. The contract term for federal ESPCs, including the construction period, may be a maximum of 25 years.

See the FEMP web site (eere.energy.gov/femp/financing/espc/legislation.html) for more information on the federal ESPC authority.

#### 2.2 Super ESPCs Streamline Energy Project Procurements

The DOE FEMP ESPC programs were created to help federal agencies improve energy efficiency in their facilities and reduce their energy costs. The Super ESPC is a streamlined and more flexible version of earlier ESPCs. FEMP's purpose in creating Super ESPCs was to provide a financing vehicle that is as practical and cost-effective as possible for agencies to use.

Under the Super ESPC programs, indefinite-delivery, indefinite-quantity (IDIQ) prime contracts were awarded to a number of ESCOs through a competitive process. The competing ESCOs were evaluated based on demonstrated capabilities to manage the development and implementation of multiple ESPC projects over a large geographic area and on their technical approach and price for a defined site-specific project. The prime contracts establish the general scope of work, terms, and conditions for firm-fixed-price delivery orders for performance-based energy projects at federal agency sites. Agencies implement ESPC projects by issuing delivery orders (DOs) under the prime Super ESPCs.

The award of the IDIQ Super ESPCs to the prime contractor ESCOs was done in compliance with FAR rules and requirements for competition. With these contracts in place, the lion's share of the procurement process is already done, and agencies move directly to developing a project. This streamlined process of gaining access to the expertise and private financing offered by ESCOs can save agencies time and money. It can take 2 to 3 years (or longer) to put a typical standalone ESPC in place, whereas awarding a Super ESPC delivery order can be completed in 4 to 12 months, if agencies are wholly committed to accomplishing a project.

#### 2.3 Eligibility to Use Super ESPCs

All federal agencies may use Super ESPCs to implement energy projects for government-owned facilities within the geographic scope of the contracts. The Regional Super ESPCs (see Basics 3.1) may be used for federally owned facilities in the United States, the District of Columbia, and all U.S. territories. The Technology-Specific Super ESPCs (see Basics 3.2) may be used for federally owned facilities worldwide.

#### 2.4 Financing Provided and No Up-Front Capital Costs

The features of Super ESPCs that are often most attractive to agencies are the financing and guarantee of cost savings. With no up-front capital outlay by the agency required, the ESCO provides all labor, materials, equipment, and engineering design for improvement projects to reduce energy costs. The contracts require the ESCOs to finance and implement ECMs for their agency customers and guarantee that these improvements will result in a specified level of annual cost savings. In return, the ESCO receives firm-fixed-price payments from the guaranteed cost savings. The ESCO and the customer agree on annual payments that are less than the cost savings guaranteed for the year, structuring a project with a long enough term to ensure that the savings are sufficient to repay the ESCO

Payments can be monthly or at other intervals rather than annual. See the *Practical Guide to Savings and Payments in Super ESPC Delivery Orders* for more information about the financial structure of Super ESPC delivery orders.

#### 2.5 Cost Savings Pay for the Project

ESPCs are guaranteed to pay for themselves through the savings generated by the installed ECMs. Savings in two categories are used to pay for the ESPC: energy cost savings and energy-related cost savings.

Energy cost savings can result from reduced energy usage or from improved efficiency. Utility costs can be decreased because of reduced peak demand, fuel substitution, renegotiated utility rates, etc.

Energy-related cost savings are from reduced expenses for operations and maintenance (O&M) or repair and replacement (R&R) of energy-consuming systems. One-time savings that are the result of the ESPC project can be applied to the project, usually as a pre-performance-period payment. For example, the agency may have been planning to replace a chiller using O&M/R&R funds, and then decide to include the chiller replacement in the ESPC project. The money that would have been used to replace the chiller in the absence of the ESPC project can be used to help pay for the ESPC project. Recurring, ongoing savings resulting from reduced O&M/R&R expenses may also be used to pay for the ESPC.

To learn more about the financial structure of ESPCs, see the *Practical Guide to Savings and Payments in Super ESPC Delivery Orders*.

#### 2.6 Qualified and Motivated ESCOs

The competitive selection of the Super ESPC prime contractors works to the advantage of agency customers. These ESCOs are heavily invested in the Super ESPC program and are driven to work hard to satisfy the customer by their motivation to earn repeat business. To provide positive reinforcement to this motivation, DOE tracks ESCO performance, making evaluations and performance data available to agencies considering their choices of ESCO partners. Contact information and qualifications sheets for Super ESPC ESCOs are posted at eere.energy.gov/femp/financing/espc/super espc escos.html.

DOE FEMP has built many protections for agencies into the IDIQ contracts, and the ESCOs bear a higher degree of risk in a Super ESPC than in a conventional contract. Super ESPC ESCOs have agreed to the terms of the IDIQ contracts, which specify that delivery orders issued against the Super ESPCs are not subject to protest procedures. Any necessary complaint resolution is

handled by an ombudsman appointed by the head of the ordering agency and DOE. (See Basics 5.6.)

#### 3. Scope of the Contracts

DOE FEMP has established two kinds of Super ESPCs. The entire United States, the District of Columbia, and all U.S. territories are covered by regional "all-purpose" Super ESPCs. Technology-specific Super ESPCs can be used for federal facilities worldwide.

#### 3.1 Regional Super ESPCs

Regional Super ESPCs are intended for implementing energy projects based on a wide variety of ECMs in designated technology categories. The Regional Super ESPCs may be used for federally owned facilities in the United States, the District of Columbia, and all U.S. territories.

ESCOs awarded regional Super ESPCs have demonstrated the capability to provide performance-based energy projects in the following technology categories:

- Boiler and chiller plant improvements
- Building automation and energy management control systems
- HVAC
- Lighting improvements
- · Building envelope modifications
- · Chilled/hot water and steam distribution systems
- · Electric motors and drives
- Refrigeration
- · Distributed generation
- Renewable energy systems
- Energy/utility distribution systems
- Water and sewer conservation systems
- Electricity peak shaving/load shifting
- Energy cost reduction through rate adjustments
- Energy-related process improvements
- Proposal development energy surveys

#### 3.2 Technology-Specific Super ESPCs

Technology-Specific Super ESPCs encourage the use of new and emerging technologies that promise substantial energy savings and are well suited for application in federal facilities, but are not well enough established in the marketplace to be readily available through routine acquisition processes. Tech-Specific Super ESPCs give agencies ready access to quality sources of expertise and financing for three renewable energy categories:

- Biomass and alternative methane fuels (BAMF)
- Geothermal heat pumps (GHPs)
- Photovoltaics (PV) and solar thermal concentrating systems

The featured technology must be a primary component of the tech-specific ESPC project, but the agency is allowed and even encouraged to include associated energy and water conservation measures to improve project economics.

The ESCOs who were awarded the tech-specific prime contracts have demonstrated their expertise in the application of these technologies through past performance and through proposing and executing specific projects defined in DOE's requests for proposals.

The Technology-Specific Super ESPCs may be used for federally owned facilities worldwide.

Specialized technical assistance with these technologies is available from FEMP Services. For more information, contact the FEMP representative in your DOE Regional Office.

#### 4. Primary Roles in the Super ESPC Process

#### 4.1 The Department of Energy

The overall responsibility for the success of the Super ESPC program is assigned to the **DOE Program Manager (DOE PM)**, who manages the overall programmatic issues and technical resources. The DOE PM is responsible for tracking and goal-setting within the program, and coordinates periodic ESCO meetings.

The DOE PM is supported by a Contracting Officer and a Contracting Officer's Representative in each DOE region and for each technology-specific IDIQ. These parties work with other technical, financial, administrative, legal, and procurement specialists within DOE to support agencies pursuing Super ESPC delivery orders.

The **DOE Contracting Officer (DOE CO)** has overall responsibility for the IDIQ contract. Only the DOE CO has the authority to modify the contract terms, conditions, and requirements. The CO monitors and maintains the status of the IDIQ's contract ceiling and reviews all delivery order requests for proposals (DO RFPs) and DOs prior to award. The CO's responsibility includes maintaining data on the ESCOs for use by ordering agencies in evaluating and selecting ESCO partners for their ESPC projects. This data includes past performance and capability information and records on all Super ESPC delivery order awards.

The **DOE Contracting Officer's Representative (COR)** guides both the agency and the ESCO through the beginning stages of the process, helping the agency with initial definition of the project and coordinating the process of providing FEMP services to the agency.

#### 4.2 The Super ESPC ESCOs

The Super ESPC ESCOs market the ESPC program to federal agencies and identify energy savings opportunities at agency sites. They are required to contact the COR prior to submitting initial proposals to agencies. The ESCOs are responsible for negotiating delivery orders in good faith and performing the work described in the delivery order, all in accordance with the Super ESPC IDIQ contract terms and conditions and the delivery order award. All Super ESPC ESCOs are listed on FEMP's web site.

#### 4.3 FEMP Services

FEMP Services was created after Congress directed FEMP to develop ways to provide technical assistance to federal agencies on a reimbursable basis to support their use of financing vehicles to achieve greater energy efficiency, water conservation, and use of renewable energy in federal facilities. FEMP Services is exempted from the Miscellaneous Receipts Act and the Economy Act, which means that agencies can use these services without having to document or certify that FEMP Services is the sole acceptable source of such services.

A Super ESPC project is like any other facility improvement or construction project: Significant analysis, engineering, and coordination efforts are required. FEMP Services provides comprehensive support for federal agencies that need technical and procurement assistance for energy and water conservation projects. The COR can help the agency determine what level of service is advisable to ensure that the project can progress quickly without compromising support to the agency's ongoing primary missions.

FEMP Project Facilitators (PFs) are experienced, unbiased advisors who help agencies avoid obstacles and expedite the implementation of their Super ESPC projects. FEMP offers the assistance of a PF to agencies at no cost starting with the kickoff meeting and extending through

the review of an ESCO's initial proposal. After that point, any additional project facilitation support is provided on a cost-reimbursable basis.

An interagency agreement (IAA) between DOE and the ordering agency is required to pay DOE for reimbursable assistance. The COR helps the agency determine needed services and execute the IAA. For more information on FEMP Project Facilitation services and the IAA, see Phase 1.4 through 1.7.

#### 5. Notable Characteristics of the Contract

ESPCs have some attributes that are relatively rare in government contracting, but are becoming more familiar to agency contracting and legal specialists as ESPCs become more common in the federal sector.

#### 5.1 Anti-Deficiency Regulations

Anti-deficiency regulations normally require that the funds to pay for contracted services must be obligated before a contractor may perform any work for the government; however, anti-deficiency rules do not apply to ESPCs. Federal agencies may enter into ESPCs with confidence in their ability to make the required payments throughout the term of the contract, because the ESCO guarantees sufficient cost savings to cover project costs. If the guaranteed savings are not realized, the ESCO must reimburse the government for any shortfall.

The ESPC authorizing legislation and regulation include language indicating that the source of only the first year's funding for performance-period payments needs to be known before making an ESPC award. As payments for ESPC awards come from energy and energy-related utility budgets, first-year funding is typically known. Also, usually funds are obligated not at award, but later, when payments become due after acceptance of an installed project, and when realized project savings are available to make those payments.

#### 5.2 Competitive vs. Single-Source Super ESPC Delivery Orders

ESPC projects that the ESCO defines and proposes to the agency on its own initiative (referred to as "ESCO- or contractor-identified projects") can be awarded single-source, without regard to the usual requirements for competition. However, projects defined by the agency ("agency- or government-identified projects") are subject to the same requirements for competition as other government procurements.

#### 5.3 Requirements for and Exemptions from Competition

The requirements for and exemptions from competition in awarding delivery orders are derived from 41 USC 253 and were incorporated into law by Federal Acquisition Streamlining Act (FASA) changes. The requirements in FAR 16.505 also apply.

Although ESPCs must comply with the FAR's solicitation and competition requirements, if the two conflict, EPACT takes precedence over the FAR.

FAR 16.505 defines the rules for awarding task orders and delivery orders under multiple-award contracts. Paragraph (b)(1) states, "Except as provided in paragraph (b)(4) . . . each awardee shall be provided a fair opportunity to be considered for each order...." Paragraph (b)(4) states that awardees need not be given an opportunity to be considered for a particular order if the contracting officer determines that

- there is an urgent need for the supplies or services;
- only one contractor is capable of providing the supplies or services;
- the order is a logical follow-on to an order already competitively awarded; or
- it is necessary to place the order to satisfy a minimum.

These four situations are commonly called justifications for waiver of competition. An agency may use one of these four justifications for waiver of competition and award the delivery order single-source if the circumstances warrant it. However, the first three exceptions would rarely be applicable for ESPC work, and the fourth one only applicable till minimum guarantees are exhausted.

A fifth exception to the competition requirement was authorized by DOE and written into the Super ESPC IDIQ. The fifth justification for waiver of competition (see IDIQ Section H.20) is:

• the delivery order is the result of a contractor-identified proposal.

The fifth justification for waiver of competition permits an agency to pursue a single-source process for awarding an ESPC delivery order, first conditionally selecting one of the multiple-award ESCOs and then accepting an initial proposal from the ESCO for a "contractor-identified" project.

This exception was included in the contract to honor the intent of the legislation to encourage ESCOs to initiate projects with agencies. The exception follows the rationale of EPACT and the DOE Final Rule that implemented the federal ESPC authority (10 CFR Part 436), which encourage agencies to accept unsolicited proposals from contractors "without regard to the requirement" for competition. The agency is simply required to publicize its intent to pursue an award for work proposed.

The full and open competition conducted by DOE in awarding the Super ESPC IDIQ contracts in accordance with established procurement procedures, and publishing a notice in *Commerce Business Daily* (now know as *FedBizOpps*) is understood to comply with the legislative requirement that single-source awards to eligible IDIQ contractors be publicized.

If none of the five justifications for waivers of competition apply, the delivery order must be awarded competitively. With rare exceptions, agency-identified projects must be open to competition, and a "fair-opportunity" review is required to verify that fair consideration is given to all the prime contractors. Government-identified projects are discussed in Basics 5.5.

#### 5.4 Fair Opportunity in ESCO-Identified Projects

With ESCO-identified projects, all ESCOs have de facto fair opportunity to market their services, establish relationships, earn the customer's trust, and persuade agencies to partner with them. Nevertheless, agencies have applied the "fair consideration" rule in various ways. ESCO qualification information maintained by DOE for each contractor is often consulted. Past performance information is kept by DOE as well and can be provided to the agency upon request. Some agencies have compared ESCOs by inviting all eligible contractors to respond to a set of written questions, either in a meeting or by correspondence.

For more information about choosing an ESCO, see Phase 1.3

#### 5.5 Agency-Identified Projects Compared to ESCO-Identified Projects

Most agencies that have used Super ESPCs have chosen to pursue ESCO-identified projects through single-source procurements. An agency may also compete a Super ESPC project award, i.e., use its own resources to identify a project, issue an RFP, and entertain proposals from several ESCOs. The competitive Super ESPC award process allows the agency to review several ESCOs' technical approaches and price proposals, although it also requires significantly more work on the part of the agency. Note that despite the terminology, the government is very involved in defining the scope and parameters of "ESCO-identified" projects. The two paths to awarding a delivery order are illustrated in the flowchart below.

An agency-identified **ESCO-identified** ORNL 99-06460/rra project: Agency project: One ESCO, defines the technical with the COR's Agency-Identified **ESCO-Identified** specifications of the permission, performs a **Project Project** project itself: preliminary site survey, assembles a site data identifies a project, and DO RFP + Site Data Package Preliminary **Project** package and RFP; and submits an initial (Agency) Site Survey Definition sends them with proposal, which the (ESCO) evaluation criteria to agency evaluates to multiple ESCOs. The decide whether or not agency receives and **ESCO ESCO ESCO** to pursue the project. evaluates multiple #1 #2 #3 The two processes are initial proposals. identical after selection of the contractor and transmittal of the Proposal Proposal Proposal Initial Proposals ESCO's notice of intent to #2 and Evaluation Initial Proposal #1 #3 award the delivery order. Selection of Notice of Intent Notice of Intent and DO RFP Contractor Detailed **Energy Survey** Revised/Final Proposal

#### 5.5.1 Developing Technical Specifications and the Site Data Package (SDP)

Developing the SDP is a significant undertaking and a time-consuming process, but it is required to provide the information that the competing ESCOs need to prepare proposals that can all be evaluated according to the same criteria. The SDP characterizes the present uses and configuration of the site and/or buildings and identifies the categories of ECMs that the agency will consider.

The SDP includes historical energy consumption data, utility rate schedules, general site information, building composition, hours of operation, functional requirements (e.g., temperature and humidity set points, lighting levels, etc.), and a complete inventory of energy-consuming equipment and systems. The SDP consists of a narrative, a spreadsheet workbook, and attachments.

A blank spreadsheet workbook and an example of an SDP are available at www.eren.doe.gov femp/financing/espc/contract\_tools.html.

#### 5.5.2 Estimate of Maximum Potential Price

The agency is required to provide an estimate of the maximum potential price of the delivery order to the DOE CO for the purpose of verifying that sufficient ordering capacity remains under the IDIQ to cover the proposed delivery order. (The ESCO's initial proposal in an ESCO-identified project provides this estimate.) Estimating maximum potential price requires preliminary selection of ECMs, estimating of savings and implementation prices, applying maximum markups and financing rates, determining a performance-period term that enables savings to exceed contractor payments with some margin for uncertainty, and summing contractor payments over the term to estimate price.

#### 5.5.3 Requirements for Proposal Contents and Evaluation

Requirements for proposal contents for government-identified projects are defined in section H.24 of the IDIQ contracts. These requirements correspond to evaluation criteria in H.25 for evaluating proposals. Both H.24 and H.25 specify the *maximum* requirements anticipated. An agency can require less extensive submissions (and permit more limited evaluation procedures) by indicating in sections H.24 and H.25 of the DO RFP the requirements to replace those in the IDIQ contract. Agencies are strongly encouraged to consider the costs to themselves and the ESCOs and the impact on project schedules of specifying overly stringent requirements for proposal contents and evaluation criteria for competitive DOs.

#### 5.5.4 Strategies for Limiting Transaction Costs for Government-Identified Projects

EPACT and the FAR authorize several methods of conducting competition in awarding delivery orders that can streamline the competitive process. The Super ESPCs allow agencies considerable flexibility to define proposal requirements and evaluation criteria that meet their needs. Just a few examples of strategies for limiting transaction costs, while complying with the intent of the IDIQ contracts to provide fair consideration to all contractors, are:

- Limit the scope of the competition (e.g., ask for proposals based on a representative subset of buildings rather than on the entire complex of buildings).
- Use oral presentations to narrow the field to two ESCOs prior to submission of written technical and price proposals.
- For simple projects, limit proposal contents to only a few pages.

#### 5.6 Complaint Resolution Regarding Fair Opportunity for ESCO-Identified Projects

The Competition in Contracting Act (CICA) process used in placing the Super ESPC IDIQs allows for single-source delivery order awards without the possibility of protest. Delivery orders issued against the Super ESPCs are not subject to protest procedures established for the award of basic contracts, except that contractors can protest that a delivery order was awarded which was outside the scope of the IDIQ contract.

FAR 16.505(b)(4) provides for the head of the ordering agency to designate a Task and Delivery Order Ombudsman (a senior agency official independent of the contracting officer) to be responsible for reviewing complaints from contractors on multiple-award task and delivery order contracts and for ensuring that all contractors are afforded a fair opportunity to be considered for the issuance of delivery orders consistent with procedures set forth in the delivery order.

Initial complaints are addressed by the ordering agency's Ombudsman, who collects all relevant facts to ensure that all contractors were afforded a fair opportunity to be considered. The Ombudsman reports any determination that corrective action should be taken to the DOE Contracting Officer. Complaints that cannot be resolved by the ordering agency's Ombudsman are forwarded to the DOE Task Order and Delivery Order Ombudsman.

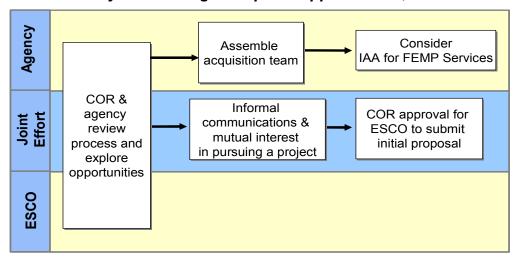
#### 6. Super ESPC Process Flowcharts

The flowcharts on the following pages depict the activities and joint efforts of the ESCO and agency during the process of developing and implementing a Super ESPC delivery order. Although the flowcharts imply a certain chronology, developing a Super ESPC project is not a precisely linear process, and each project is unique in any case. However, all Super ESPC projects follow some version of the process represented in the flowcharts.

The flowcharts are presented here all together for the reader's convenience, and appear again in the chapters on phases 1 through 4 of the Super ESPC process.

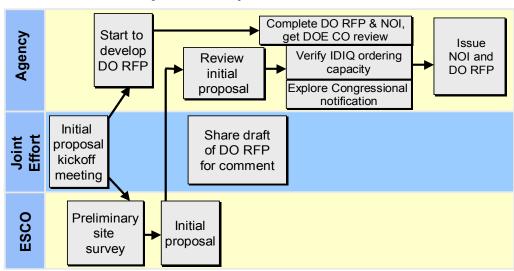
## Super ESPC Process Flowcharts

Phase 1. Project Planning — Explore Opportunities, Assemble Acquisition Team, and Plan

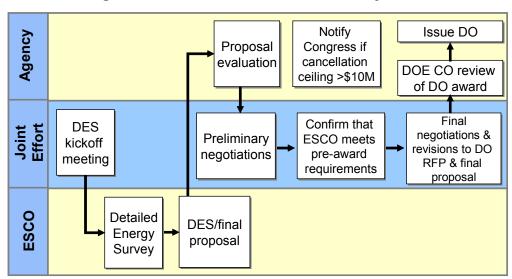


- The contracting officer's representative (COR) from the DOE Regional Office (RO) reviews the Super ESPC process with the agency, exploring the opportunities for a successful project.
- Agency assembles its acquisition team and develops an acquisition strategy.
- Informal communications with an ESCO or ESCOs.
- RO and agency begin to consider need for project facilitation or other services and execution of an interagency agreement (IAA) to pay for those services.
- ESCO is given approval to submit the initial proposal.

Phase 2. Initial Project Development — Select an ESCO and Develop DO RFP



- · Kickoff meeting between agency and ESCO.
- Agency receives ESCO's initial proposal (IP), evaluates it, and determines whether to pursue a project.
- Agency verifies ordering capacity with DOE Contracting Officer (CO) and begins Congressional Notification process, if necessary.
- Agency works with ESCO (and FEMP project facilitator, if engaged) to finalize DO RFP for issuance. To expedite the process, it is recommended that the agency share the draft DO RFP with the ESCO before issuance.
- Agency obtains DOE CO review of DO RFP and Notice of Intent to Award (NOI).
- Agency issues NOI to the ESCO
- Agency issues the DO RFP to the ESCO.

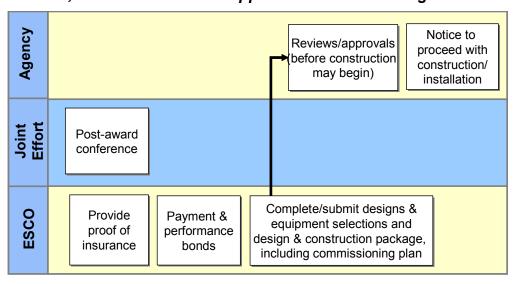


Phase 3. Negotiation and Award of Final Delivery Order

- Detailed Energy Survey (DES) kickoff meeting is held.
- ESCO conducts DES.
- Agency receives ESCO's final proposal with DES findings and evaluates.
- · Preliminary negotiations begin.
- Agency issues a Congressional Notification if cancellation ceiling exceeds \$10,000,000.
- Agency confirms ESCO meets pre-award requirements.
- Final negotiations between agency and ESCO; agreement is reached on all issues.
- DOE review of DO documents.
- Agency awards DO at least 30 days after Congressional Notification (if applicable).

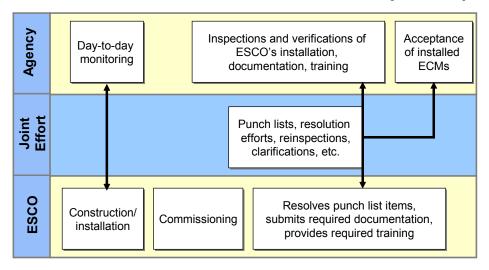
Phase 4. Implementation and Performance Period

Phase 4. Part 1. Review and Approval of ESCO's Design & Construction Package



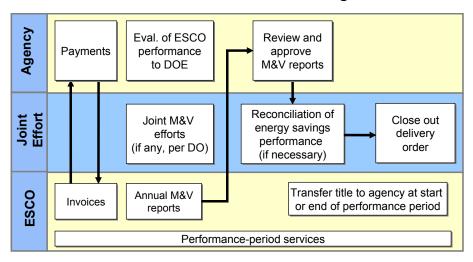
- ESCO and agency hold a post-award conference.
- ESCO provides any required proof of insurance and payment and performance bonds.
- ESCO submits design and construction package, including commissioning plan.
- Agency reviews and approves construction package before construction may begin.
- Agency issues notice to proceed with construction to ESCO.

## Phase 4, Part 2. Installation/Construction and Project Acceptance



- Design and construction of ECMs completed.
- ESCO performs commissioning and post-installation M&V, and agency reviews and approves.
- ESCO verifies potential of ECMs to generate guaranteed savings and comply with facility performance requirements.
- All ECMs are inspected and accepted by the government.

## Phase 4, Part 3. Performance Period Through Closeout



- Payments are made by the agency to the ESCO.
- Agency reviews and approves the ESCO's M&V reports.
- · Closeout of delivery order.

## The Super ESPC Delivery Order Process

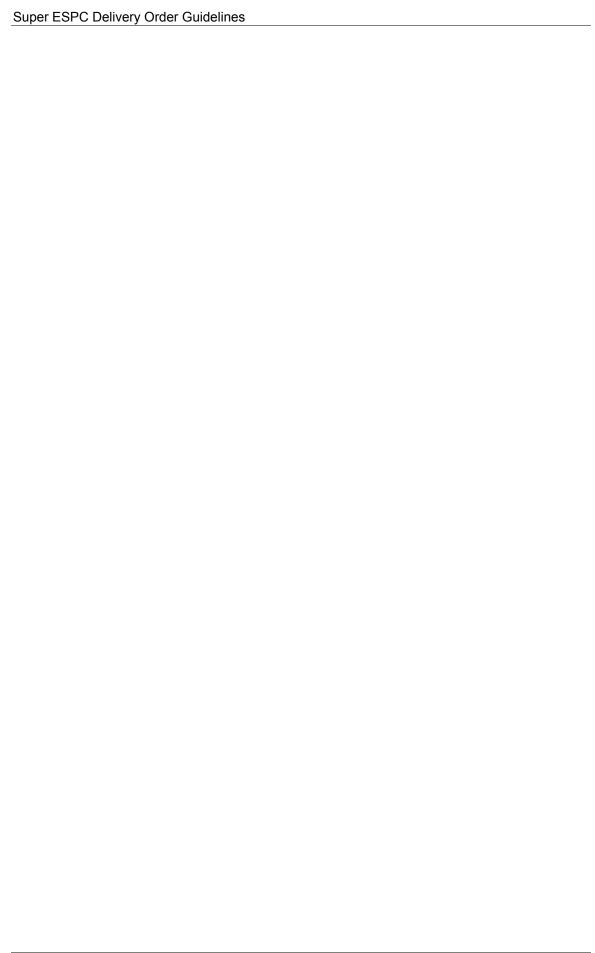
#### Introduction

This section of the *Guidelines* describes the process of developing and implementing a delivery order under a Super ESPC. The process is described in detail in the following sections, which cover phases 1 through 4 of the process:

- Phase 1. Project Planning
- Phase 2. Initial Project Development
- Phase 3. Negotiation and Award of Final Delivery Order
- Phase 4. Implementation and Performance Period

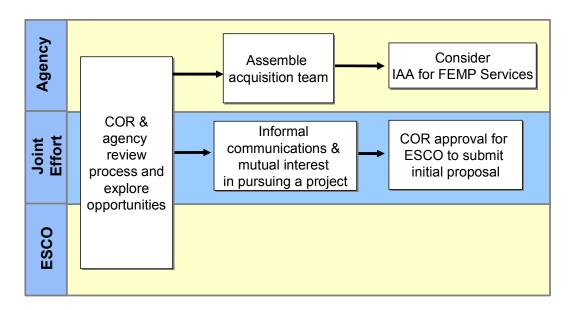
This overview describes a contractor-identified project procured from a single source. (For competitive procurement of a government-identified project, phases 2 and 3 would deviate as shown in Basics 5.) We assume in this description that the project proceeds to a successful conclusion, without major detours, such as a decision not to proceed after reviewing the initial proposal.

The flowcharts depict the activities and joint efforts of the energy services company (ESCO) and agency for each project phase. Although the flowcharts imply a certain chronology, developing a Super ESPC project is not a precisely linear process, and each project is unique in any case. However, all Super ESPC projects follow some version of the process represented in the flowcharts.



## **Phase 1: Project Planning**

## Explore Opportunities, Assemble Acquisition Team, and Plan



#### 1.1 Getting Started — Contact a DOE Contracting Officer's Representative

The DOE Contracting Officer's Representative (COR) is DOE's coordinator of the Super ESPC process in the first phase of project development. One COR is assigned for each group of regional and technology-specific Super ESPCs. The DOE Super ESPC CORs can be contacted through the DOE Regional Offices. See

www.eere.energy.gov/femp/financing/espc/getting\_started.html for current contact information.

With the COR's help, the agency focuses on the following objectives in Phase 1:

- Determining whether a "pay-from-savings" project is feasible
- Educating agency staff about ESPCs
- Developing support in the agency needed to initiate a project and see it through in a timely manner
- Establishing the preliminary scope and goals for the project

#### 1.2 Assemble an Acquisition Team

The acquisition team steers the agency's efforts in developing the project, builds support for the project inside the agency, and obtains the necessary management approvals. The team should include anyone who could potentially have a significant impact on progress toward awarding a delivery order. The makeup and commitment of the team is an important determining factor in the success or failure of a project.

The acquisition team must include at least the agency contracting officer and a Site Technical Representative (STR), who serves as the principal point of contact on technical issues. The acquisition team should represent all organizations that are affected by or should be consulted about project, such as the following:

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Facility management

- Energy, design, and construction engineers
- Procurement officials
- Lega
- Budget/comptroller
- Administrative services
- Maintenance
- Security personnel
- Union representatives and labor relations
- Agency customers and tenants
- Environment, health, and safety

The acquisition team should be designated, on-board, and educated about Super ESPC rules and benefits early in the process. As early as possible and throughout the process, acquisition team members should identify the agency decision makers who have the authority to approve a Super ESPC project, educate them about the Super ESPC program, familiarize them with the site's project plans, and ensure that they have all the information they need to approve the project. Lack of an acquisition team and the support of upper management can severely impede or entirely halt the process after significant resources have been expended by the agency and the ESCO.

#### 1.2.1 Acquisition Planning and Strategy

Although no formal acquisition plan is required, the acquisition team must formulate a strategy for completing the procurement. The team must determine what actions are necessary for a successful project, who will be responsible, and when and how these actions will be accomplished. It is essential that all acquisition team members and appropriate management officials should be committed to the final plan.

The acquisition strategy should include a schedule of all actions necessary to award the delivery order, with an individual assigned responsibility for each action. The success of any procurement strategy depends on continuous assessment of progress. The acquisition team should frequently compare the action plan to actual accomplishments to ensure that inertia or other impediments to progress are overcome quickly.

#### 1.2.2 Firm Agency Commitment Controls Costs

The amount of agency resources required to develop an ESPC project is usually inversely proportional to the agency's ambition for project success. Costs are minimized when the organization is wholly committed to achieving a successful project. Lack of buy-in from site management or acquisition team members' managers can result in back-tracking and other unproductive activities that occupy staff time without producing any progress.

#### 1.2.3 Issues to be Addressed by Acquisition Team

The acquisition team will need to consider the issues listed below, along with others more specific to the candidate site, when considering or planning an ESPC project.

- Future use of the facilities An agency might not want to pursue a Super ESPC delivery order at a facility that could be closed down during the performance period of the delivery order.
- Needs and desires of facility occupants Are there problems with keeping the area at a
  comfortable temperature or problems meeting environmental requirements? These types of
  concerns by agency employees would motivate an organization to work hard to help an
  ESPC succeed.
- Condition of existing equipment Is the equipment old and unreliable so that it will require replacement or major repairs soon?

- Utility budget and energy-related equipment and O&M budget Is the annual utility budget large enough to attract an ESPC proposal (greater than \$500K), and is it stable, or increasing in size? Are there any energy upgrade projects or service contracts that could be transferred to the ESPC?
- Scope What areas or facilities may be included in the delivery order?
- Energy conservation measures What ECMs would the agency consider for a project? How could the agency bundle them for a better project?
- Potential savings both in energy units and dollars Are dollar savings large enough to attract an ESCO and provide a payback period which would be acceptable to the agency?
- M&V approach
- Conflicts with current or pending construction projects
- Obstacles Are there barriers to a project, such as security issues, union issues, or management attitudes, that would make a delivery order unworkable?
- Other issues What do the managers of these facilities need to do to support the project? Where will the ESCO have on-site space and who is in charge of it? Are agency subcontractors involved on site? Are there other contractual arrangements in place that might be affected by an ESPC project?

#### 1.3 Forging Good-Faith Relationships with ESCO Partners

#### 1.3.1 COR Approval for ESCO to Submit Initial Proposal

The interchange between an agency and an ESCO may be initiated by either party. The ESCO may approach a site, or the agency may contact one or more ESCOs, to begin discussions about a potential project. The ESCO must obtain the COR's approval before submitting an initial proposal to the agency.

Agencies using the Super ESPCs can help to maintain the program's value to future federal ESPC customers by using the process appropriately. The Super ESPCs were structured to allocate the greater share of the business risk to the ESCO. An ESCO may spend more than \$1 million on developing initial and final proposals for a \$3 million project, at no obligation to the agency until the delivery order award is signed. The ESCO can recover project development costs in the implementation price only if the project is ultimately awarded. If the project is not awarded, the ESCO suffers a serious loss, or recovers the costs by raising the rate of "overhead" added to the price of future delivery orders.

The requirement for COR approval before initial proposals are submitted is intended to help maintain good-faith relationships with the Super ESPC prime contractors and ensure that all agencies can implement their projects as cost-effectively as possible. To minimize the chances of

ESCOs investing their resources in initial proposals that are unlikely to be given good-faith consideration, the COR must be convinced that the agency is genuinely committed, willing, and able to seriously entertain a proposal for a single-source, ESCO-identified project.

All Super ESPC ESCOs, their contact information, and qualifications statements are listed on FEMP's web site at http://www.eere.energy.gov/femp/financing/espc/esco.html

#### 1.3.2 Informal Communications to Survey Qualified ESCOs

A Super ESPC project is a long-term partnership between the agency and the ESCO, requiring effective communication and close cooperation, and many agencies are reluctant to choose an ESCO partner before exploring their options. Although it is explicitly prohibited for agencies to "auction" projects to the lowest bidder, the agency has the right to participate in informal communications with several or all of the eligible prime contractors before deciding which one to

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do business with. There are several inexpensive ways for agencies to survey the field to determine which ESCOs offer the capabilities most in line with agency needs:

- Information on the qualifications of all Super ESPC ESCOs is maintained by DOE and is available on the FEMP web site. Data on past performance is also available from the DOE CORs.
- The agency can invite ESCOs to make marketing calls.
- The agency can invite the eligible ESCOs to respond (with a limited amount of information) to questions about the ESCO's technical strengths, management approach, or other factors that will help the agency determine which contractor is preferred. The agency can specify the venue as well teleconference, written correspondence, meeting, or other.

#### 1.4 Using FEMP Project Facilitators

A FEMP Project Facilitator (PF) is an experienced, unbiased advisor who can help the agency avoid obstacles and expedite the project. FEMP PFs provide expert consultation on contractual and financial issues, technology and engineering issues, and M&V, to guide the agency through the entire process of developing, awarding, and verifying savings from the Super ESPC project. PFs also have the experience to assure that agency partnerships with ESCOs are balanced.

Agencies have found that FEMP Project Facilitators can lighten the acquisition team's load and help the agency develop a best-value project with persistent savings. PFs help agencies to

- achieve fair and reasonable pricing,
- minimize interest rates,
- · keep the process on track and start saving as soon as possible, and
- employ cost-effective measurement & verification strategies.

FEMP offers the assistance of a Project Facilitator to agencies at no cost starting with the kickoff meeting and extending through the review of an ESCO's initial proposal. After that point, any additional project facilitation support is provided on a cost-reimbursable basis.

For more information about FEMP project facilitation services, see "Optimize the Value of Your Super ESPC Project—Use a FEMP Project Facilitator," in the *Agency Project Binder*.

#### 1.5 The Interagency Agreement (IAA) for Reimbursable FEMP Services

An interagency agreement (IAA) between DOE and the ordering agency is required to pay DOE for reimbursable assistance. An IAA consists of a standard form, a work statement describing the services FEMP will provide, and accounting and payment information. The services to be provided and the IAA work statement are tailored to meet agency needs and are priced based on the estimated level of effort and FEMP Services hourly rate for the requested tasks. The COR coordinates the IAA process and can help the agency determine needed services.

See Basics 4.3 for more information on FEMP Services and IAAs.

Templates for the IAA are provided in the *Agency Project Binder*, or can be downloaded from eere.energy.gov/femp/financing/espc/project\_facilitation.

## 1.6 Standard Project Facilitation Packages

The estimated cost for FEMP's standard assistance package for a contractor-identified project (single-source procurement) is \$30,000.

assistance package for an ESCO-identified project is in the *Agency Project Binder* and also posted on FEMP's web site at www.eere.energy.gov/femp/financing/espc/project\_facilitation.html.

Reimbursible services begin after review and discussion of the ESCO's initial proposal and include assistance in

- developing the first draft of the delivery order request for proposal (DO RFP),
- analyzing the contractor's detailed energy survey and final proposal,
- support during the implementation period, and
- review of the first M&V report on performance of the installed ECMs.

FEMP offers a full range of services in addition to the standard package, and agencies can tailor their support packages to meet their own particular needs. Services are priced based on the estimated level of effort and FEMP Services hourly rate for the requested assistance.

Standard assistance for a government-identified project (competitive procurement) is estimated to cost \$50,000. Typical support includes all services provided for contractor-identified projects plus assistance with developing a site data package.

#### 1.7 Technology-Specific Assistance from FEMP

FEMP offers specialized assistance with energy efficient and renewable energy technologies, particularly for the technology types featured in the tech-specific Super ESPCs — geothermal heat pumps, biomass and alternative methane fuels, and photovoltaics. FEMP specialists in combined cooling, heat, and power (CHP) and distributed generation / distributed energy resources (DG/DER), and other renewable energy technologies are also available to help federal agencies with their energy projects.

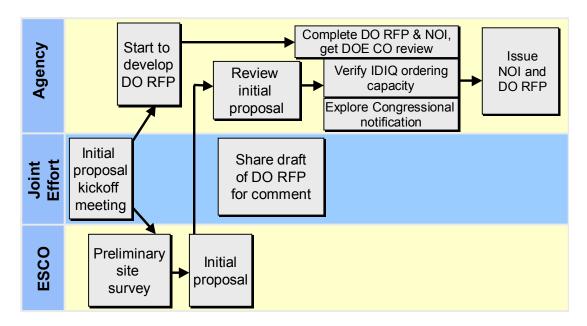
The FEMP web site, at www.eere.energy.gov/femp/financing/espc/fempassistance.html, describes the available assistance.

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## **Phase 2: Initial Project Development**

## Select an ESCO and Develop DO RFP



### 2.1 Initial Proposal Kickoff Meeting

The initial proposal kickoff meeting is an important opportunity for the agency and ESCO to begin working together as a team. An ESPC project requires a true partnership, and the free and open sharing of information benefits both parties.

A sample agenda for a kickoff meeting, and a list of subjects for discussion with the ESCO at this meeting are provided in the *Agency Project Binder*.

During the meeting, the agency and ESCO exchange information to

- help prepare the ESCO for the preliminary site survey,
- clarify expectations,
- establish communications protocols, and
- develop a schedule for agency and ESCO tasks through award of the delivery order.

The agency uses the kickoff meeting to make sure that the ESCO has a clear understanding of the agency's priorities and general parameters for the project. Final decisions and complete agreement are not necessary or expected at this stage, but general guidelines can be established concerning the following:

- Which buildings or sites are to be targeted
- Problems that need to be fixed
- Potential ECMs
- M&V approach
- · Payback ranges
- Project timelines
- Length of contract term

After the initial proposal kickoff meeting, the ESCO will begin the preliminary site survey.

#### 2.2 ESCO's Preliminary Site Survey

During the preliminary site survey the ESCO gathers data for developing the initial proposal. The ESCO uses any agency guidance on required or desired ECMs, agency-furnished utility billing data, and other information provided by the agency. Although the site survey is an ESCO-driven action, the agency does have certain responsibilities, such as facilitating access to the site, and may wish to provide an escort. Although this activity may be time-consuming for the agency, it's an important step in acquainting the ESCO with site operations.

#### 2.3 ESCO's Initial Proposal

The initial proposal is intended to give the agency enough information to make a confident decision on proceeding with the project, but is not expected to reflect a complete understanding of agency- and site-specific requirements. The initial proposal is intended to be produced at modest cost to the ESCO. Any ESCO awarded an IDIQ contract under the Super ESPC program may identify a delivery order project and offer an initial proposal if approval is granted by the COR and the project is within the general scope of the IDIQ contract. The initial proposal must comply with the IDIQ contract (Section H.21). The initial proposal includes

- a narrative summary of the proposed project,
- · descriptions of the ECMs,
- M&V overview.
- · risk and responsibility matrix,
- · estimates of proposed energy and cost savings, and
- estimated price.

Financial schedules are required components of ESCO price proposals. The initial proposal contains delivery order schedules DO-1 (Initial), DO-2, DO-3 and DO-4. The schedules are discussed in more detail in Phase 3.

#### 2.3.1 ESCO Develops Initial Proposal at Own Risk

The government is not liable for the ESCO's costs for development the initial proposal unless a delivery order based on the proposal is issued to the ESCO. If no delivery order is awarded, the government has no rights to the contractor's proprietary work products, such as surveys, data, feasibility study reports, and design documentation.

#### 2.4 Review of Initial Proposal

The agency's decision on whether or not to proceed with the project is based on its evaluation of whether the ESCO-identified project appears to be feasible and whether the proposal meets agency wants and needs while abiding by the requirements defined in the IDIQ. The IDIQ contract specifies standard review and response times for initial proposals (Section H-22).

#### 2.4.1 Initial Proposal Review Guidance

Guidance on reviewing initial proposals is provided in the *Agency Project Binder*. Some of the criteria to consider are the following:

- Are ECM descriptions and projected energy savings reasonable, acceptable and comprehensive?
- Is M&V approach reasonable and appropriate?

- Is estimated annual cost savings reasonable and consistent with technical approach?
- Are service-phase line items, contract term, and total cost reasonable and consistent with technical approach?
- Does this meet (or can it be adjusted to meet) the majority of our needs?
- Is it an appropriate project for a performance contract?
- Is it a good deal for the government?
- Do you think your agency and the ESCO can have a good long-term relationship?

If the ESCO has proposed a feasible, valuable project, then it is generally expected that the agency will continue on a single-source path with the ESCO. The proposal won't be perfect, but it should include all the top-priority ECMs expected in the final package. Any agency or FEMP comments on the initial proposal should be recorded, consolidated, and provided to the ESCO. These comments should be resolved in the detailed energy survey (DES) and final proposal, without requiring additional iterations of the initial proposal.

If the agency feels that there is no reason to proceed with the ESCO, it can issue a letter rejecting the ESCO's proposal. In this case, all copies of the proposal are returned to the ESCO. The agency may entertain other proposals for contractor-identified projects from other Super ESPC ESCOs using the same process, but may not disclose the original ESCO's proprietary information. Until an agency commits to go forward with a DO there is no cost risk to the government.

#### 2.5 Notice of Intent to Award

The agency contracting officer formalizes the decision to proceed and conditionally commits to awarding a project to the ESCO by transmitting a Notice of Intent to Award (NOI). The notice specifies a time frame and any conditions incumbent on the selected ESCO for conducting the detailed energy survey and submitting a final proposal.

A sample NOI letter is provided in the *Agency Project Binder*.

The government is not liable for costs associated with audits and preparation of initial proposals unless a delivery order is awarded for the project addressed by the initial proposal. Once the notice of intent to award is issued, however, the ESCO may expect to recover project development costs as part of the negotiated DO price.

The two-step Super ESPC process calling for initial and final proposals was established in the IDIQ contracts in accordance with the legislated ESPC authority, based on consensus among federal policy makers and the ESCO community on how to best conserve time and money for both parties. At the point of issuing an NOI, the agency has already enjoyed a no-risk assessment of their desired project, and the process requires that a decision be made so that the ESCO will not continue to invest even greater resources at continued risk. The law and contract process recognize that the ESCOs could not operate, and there would be no program, if ESCOs' project development investments were at risk until award. Therefore, it is important that the agency be certain of its commitment before issuing the NOI, and that the notice contain any conditions deemed necessary by the agency.

#### 2.6 Verification of Sufficient Ordering Capacity in IDIQ

The agency should provide an estimate of the maximum potential price of the delivery order to the DOE CO before the NOI is issued. The price estimate in the ESCO's initial proposal, perhaps with a safety factor, can be used for this purpose.

#### A Note Concerning Congressional Notification

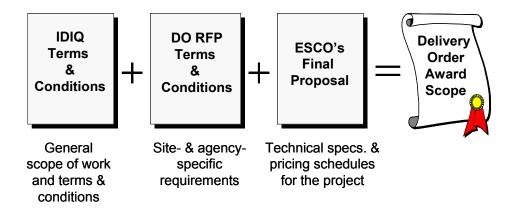
If the cancellation ceiling for the first year of the term is more than \$10,000,000, Congress must be notified (see Phase 3.8). FEMP recommends that agencies review their internal Congressional notification process and investigate the chain of command and signing authority while developing the DO RFP. Depending on the signatures required within the ordering agency, it could take months to get a letter through internal channels and then to Congress. Initial drafting of the Congressional notification letter during the development of the DO RFP and submission concurrent with negotiations of the final proposal assists in the timely award of the DO.

#### 2.7 The Delivery Order RFP

Super ESPC is a departure from "business-as-usual" contracting, and its success depends on a working partnership between agency and ESCO. At any time during project development, and especially when the DO RFP is taking shape, each party should be happy to disclose findings that could affect the development of the DO RFP. Preventing delays and ensuring that the project moves forward efficiently saves money for the agency and the ESCO.

#### 2.7.1 Function of the DO RFP

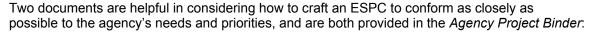
The Super ESPC IDIQ contracts are intended to be flexible and to accommodate the particular requirements of the ordering agencies. Agencies are expected to use the DO RFP to tailor the IDIQ contract to their needs and circumstances by incorporating into the delivery order all agency-, site-, and project-specific standards, procedures, functional requirements, terms, and conditions (not already addressed in the IDIQ), and to communicate these requirements to the ESCO. The terms of the DO RFP and the DO override the terms of the IDIQ contract. The role of the DO RFP in the final delivery order award scope is portrayed schematically below.



Only the contract provisions that need to be altered or supplemented to specify the requirements of the agency customer are addressed in the DO RFP. Any provision of the Super ESPC may be altered, unless alteration is specifically prohibited (see sections C.1 and H.19 of the IDIQ contract).

Some provisions must be addressed in the DO RFP to include agency-specific information, such as contact information and invoicing procedures. Agencies also generally use the DO RFP to specify how operations and maintenance (O&M) or equipment repair and replacement (R&R) is to be handled; special environmental, safety, and health requirements; compatibility requirements for design drawings; and other requirements.

It is imperative that those developing the DO RFP communicate with site support organizations to accurately identify all requirements and to ensure that the wording in the DO RFP addresses those requirements.



Fine-Tuning for Best-Value Super ESPCs Using the Risk & Responsibility Matrix," and

the Risk & Responsibility Matrix itself.

Whether a project is ESCO-identified or agency-identified determines some of the content of the DO RFP. Requirements for proposal content and evaluation guidance can be included in the DO RFP, but are usually not for ESCO-identified proposals.

## 2.7.2 Prescriptive DO RFP Template

A prescriptive template for the DO RFP is provided to minimize the time and effort required for DO RFP development. The template identifies and shows the IDIQ provisions that usually require additions or amendments to specify agency-, site- or project-specific requirements. (Any provision may be altered, however, if it is within the scope of the IDIQ). The template lists the provisions by number, in the order in which they appear in the contract. Using the template as a guide to developing the DO RFP saves time, as it precludes the need to review the entire IDIQ contract in order to determine what should or must be addressed in the DO RFP. Also, ESCOs are familiar with the format.

The prescriptive DO RFP template is provided in the *Agency Project Binder*.

A compendium of examples — clauses that agencies have used in their DO RFPs — is available on FEMP's web site.

Prescriptive templates for the GHP and PV Technology-Specific Super ESPCs are posted on FEMP's web site at www.eere.energy.gov/femp/financing/espc/contract\_tools.html.

## 2.7.3 Subcontracting Goals

The DO RFP should include an indication of the subcontracting goals that the agency wants the ESCO to meet in the delivery order. The IDIQ contract includes a Subcontracting Plan for each ESCO that establishes overall goals required for all delivery orders issued against the contract during its term. The agency contracting officer or acquisition team, however, may establish achievable goals for the project delivery order efforts based on the composition of their project. At this point the project will be sufficiently defined to permit identification of the subcontracting goals. This will be another item negotiated and included in the award. The DO RFP prescriptive template provides direction for this as well.

## 2.7.4 Examples of Using the Prescriptive Template

Examples showing how the DO RFP template is used to address agency requirements for asbuilt drawings, invoicing instructions, and subcontracting requirements are given in the boxed text on the following pages. The examples show

- 1) the language as it appears in the IDIQ contract,
- 2) the DO RFP template language, including guidance for adding specifications where required or allowed, and
- 3) the contract provision as amended by one agency in its site-specific DO RFP.

#### 2.7.5 Updating the DO RFP for the Final Delivery Order

Since the DO RFP, together with the IDIQ contract and final proposal terms, comprises the scope DO award, and because the DO RFP overrides other terms and conditions, it is imperative that the DO RFP be updated from a solicitation document to one that reflects the final negotiated

terms and conditions of the award. Any provision may be added, deleted, or changed as necessary at this point to reflect negotiations.

## **Examples of Using the DOE RFP Prescriptive Template**

## **Example 1: As-Built Drawings**

## IDIQ Contract Language

C.5.7 As-Built Drawings — After completion of installation and Government acceptance of installed ECMs, the Contractor shall submit as-built drawings to the Agency Contracting Officer or his/her designated representative in accordance with agency standards or specifications identified in the delivery order.

## **DO RFP Template Instructions**

C.5.7 As-Built Drawings — The contract indicates that as-built drawings shall be submitted in accordance with agency standards or specifications identified in the delivery order. Specify these standards and/or specifications, and if there is a time period to be specified for Government review, also specify it here.

## Agency DO RFP Language

C.5.7 As-Built Drawings — NOTE: The requirements specified herein supercede those in Section C.5.7 of the IDIQ contract.

Within 30 working days after completion of installation and government acceptance of the installed ECMs, the contractor shall submit as-built drawings to the Agency CO. Submit two (2) full size hard copies and electronic copies. The electronic copies shall be in Microstation SE format on a CD-ROM.

## **Example 2: Invoicing Instructions**

#### IDIQ Contract Language

G.2 Invoicing Instructions — The contractor shall submit invoices in accordance with the specific instructions provided in each delivery order issued against this contract. These instructions will vary by ordering agency, and will include invoice format, invoice contents and any required attachments or enclosures, submission and addressing instructions, etc. Included with each invoice will be ECM performance data as required by the site-specific M&V Plan, unless not required by the delivery order.

## DO RFP Template Instructions

G.2 Invoicing Instructions — Specify all invoicing instructions, to include invoice format, invoice contents, and any attachments and enclosures, submission and addressing instructions, etc.

## Agency DO RFP Language

G.2 Invoicing Instructions — Invoices shall include delivery order number and be sent to the following address:

#### [Address]

Format samples of invoices shall be submitted by the contractor within 30 days following the issuance of the Notice to Proceed with construction. The final format of invoices for this delivery order will be based on approval of the Contracting Officer and his/her Resident Engineer. Invoicing format approval must be obtained prior to the first invoicing of the Government.

## **Example 3: Delivery Order Subcontracting Requirements**

## IDIQ Contract Language

Part III, Section J, Attachment 6 to the IDIQ contract includes a Subcontracting Plan that establishes goals required for all delivery order awards issued against the contract during its term.

#### **DO RFP Template Instructions**

Section J of DO RFP lists one of the attachments as Delivery Order Subcontracting Plan Requirements, if applicable\* — \*If the agency wishes to establish subcontracting goals for their delivery order, they may do so by attaching these requirements to the DO RFP. (The IDIQ contract includes a Subcontracting Plan that establishes overall goals required for all delivery order awards issued against the contract; the Agency may establish achievable goals for this specific project, based on the composition of it, and these do not need to match the contract requirements.)

#### Agency DO RFP Language

(Attachment included in the DO RFP providing subcontracting goals, as follows.)

The contractor shall provide a Small Business Subcontracting Plan for this delivery order award that, based on the expected composition of this project, provides for the following subcontracting goals for the implementation phase:

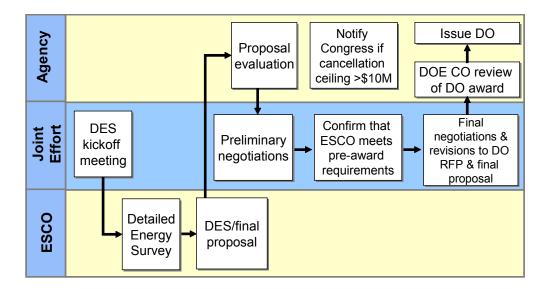
Small Business Concerns: 10%
Small Disadvantaged Business Concerns: 5%
Woman-Owned Business Concerns: 5%

Goals for the performance phase of the performance are not established, but proposing goals is encouraged.

If the above goals cannot be met for the project proposed, the proposed goals will be provided in the Subcontracting Plan provided with the DES/Final proposal, with an explanation of why they are what is attainable.



# Phase 3. Negotiation and Award of Final Delivery Order



## **Overview of Phase 3**

Having been given a Notice of Intent to Award, the ESCO is in a position to begin preparing the final proposal. The ESCO's final proposal is the basis for negotiating the final terms and conditions of the delivery order. The final proposal provides the technical description of the project including detailed ECM descriptions and savings, M&V plan, O&M, etc., as well as the price proposal.

Notwithstanding the NOI issued by the agency, award to the ESCO is still conditional upon the final proposal's conformance to all requirements defined in the IDIQ (as modified by the DO RFP) and upon successful negotiation and agreement on the requirements of the DO and the content of the final proposal. Award is also contingent upon the ESCO's ability to meet several other preaward requirements defined in the IDIQ contract.

# 3.1 Detailed Energy Survey Kickoff Meeting

The ESCO completes a detailed energy survey (DES) as part of developing the final proposal. The DES kickoff meeting is useful for

- introducing new staff on both sides.
- · reviewing milestones from meeting to award
- reviewing requirements for submission of final proposal (i.e., content and level of detail)
- reviewing access procedures and security requirements.
- clarifying as necessary the agency- and site-specific requirements in the DO RFP, and
- establishing communications protocols.
- A sample agenda for a DES kickoff meeting is provided in the *Agency Project Binder*.

At a minimum the DES kickoff meeting should ensure that the agency and ESCO agree on

- · the schedule going forward,
- the buildings included in the scope,
- the general O&M approach, and
- the general M&V approach.

The meeting should also include a discussion of the agency's intent regarding support of commissioning.

If reimbursable FEMP services have been acquired by the agency, FEMP can facilitate the kickoff meeting, helping to establish roles, responsibilities, timelines, and communications protocols, as well as a plan for coordinating the process of reviewing the revised/final proposal.

## 3.2 The Detailed Energy Survey

The ESCO usually sends a team of engineers led by a senior project developer to perform the DES. The agency generally provides an escort and/or arranges for access to the buildings to be surveyed.

The DES is the ESCO's investment-grade audit of facilities and energy systems at the project site. The DES augments, refines, and updates the preliminary site survey data and provides the information needed to establish the energy and O&M baselines and update the feasibility analyses of the ECMs under consideration. Such information is also used to verify or adjust the estimated annual cost savings and confirm the contractor's ability to structure a project with an acceptable term, with guaranteed annual cost savings that cover the firm-fixed-price contractor payments. The DES is the basis for the revised technical and price proposals.

## 3.3 The Revised/Final Proposal

The ESCO integrates findings from the DES with the requirements stated in the IDIQ and DO RFP to produce the final proposal. Findings of the DES findings are usually submitted as part of the final proposal. The proposal reviews ECMs considered, their feasibility, energy savings calculations, rationale for ECM selection, costs to implement each ECM with detailed backup information, and annual cost savings of each ECM with detailed supporting data.

The final proposal should also address appropriate M&V methodology, the energy and O&M baselines, management plan, and pricing. The final proposal content is specified in the IDIQ contract and may be modified as allowed by the DO RFP. Negotiations to achieve agreement on a final delivery order are based on the final proposal and any other post-DES submittals.

The final price proposal includes revised schedules from the initial proposal and completed (negotiated) schedules, as required by the IDIQ. The negotiated schedules are included in the DO award.

## 3.4 Agency Review of Revised/Final Proposal

The agency's careful review of the DES report and final proposal is critical in preparing for negotiating the final delivery order and, as in any contract obligation, ensuring that the agreement is a good business deal for the agency. A thorough and systematic review before accepting the offer is imperative.

Five factors established in the final proposal and supported with detailed backup are the basis of the financial value of the contract to the agency in the years to come:

- ECMs and their estimated and guaranteed annual cost savings
- An acceptable and appropriate M&V methodology to verify that the savings are being delivered
- The project intent document and commissioning plan outline
- A management plan to ensure an adequate organization structure, and a mutually agreed-upon Risk & Responsibility Matrix
- Adequate O&M support and R&R services

The review of each of the proposal sections requires coordination between members of the acquisition team, with different team members assigned to review parts of the proposal for which they have relevant expertise. Developing a review plan and setting aside focused review time greatly assists the team in making a thorough and timely review.

#### 3.4.1 ECM Description and Projected Energy Savings

The ECM descriptions and project savings should be carefully reviewed. At a minimum, evaluate the ECMs for the following:

- Technical feasibility, reasonableness and acceptability
- An energy analysis based on sound assumptions and engineering principles
- Adequate backup documentation on energy and O&M savings
- Only acceptable impacts on government facilities and operations
- · Suitability and service life of proposed equipment
- Adequate consideration of potential environmental impacts

#### 3.4.2 M&V Plan

Careful consideration should be given to the final M&V plan, because it specifies how savings will be determined. The final M&V plan should specify the following for the entire contract term:

- M&V methods to be employed
- Measurements, calculations, and stipulations
- Required content of the annual M&V report
- Recurring M&V deliverables, e.g., reports required with each monthly invoice, if continuous measurements are performed
- One-time M&V deliverables, e.g., the report required at ECM commissioning
- Responsibility for M&V activities, preparation of analyses, and documentation

At a minimum, the agency's review of the M&V plan should confirm the following:

- Approach to post-installation M&V (commissioning) is adequate and acceptable
- Approach to performance-period M&V is adequate and acceptable, appropriately allocating risk between the agency and the ESCO
- Dispute resolution approach is acceptable
- Methods for establishing, and characterization of, pre- and post-baseline conditions is adequate and reasonable

#### 3.4.3 Definition of Baselines

The definition of baseline energy use and facility conditions is of prime importance in ensuring that measurements after the retrofit will accurately represent the facility's energy use, energy savings, and O&M/R&R savings. The baselines, determined before installation of the ECMs, are used to estimate what the facility's energy use would have been during the contract term had the retrofits not been done. Savings are determined by comparing a facility's energy use after ECM installation to what its energy use would have been if the ECMs had not been installed.

The final proposal should contain a complete description of the baseline energy use and associated operation and occupancy profiles to a level of detail dictated by the M&V methods agreed to in the M&V plan. These data are usually documented down to the system level, e.g., power consumption rate and operating hours for a lighting retrofit. Note that data collected during the DES is generally used for determining the baselines.

If whole-building methods are used, the baseline statistical model or computer simulation of the baseline must be calibrated with current and historical data prior to measure installation, and preferably before award.

This is your last chance to capture your baseline energy use and associated parameters! The baseline is used for the term of the contract, yet much of the equipment that made up the baseline will be modified or removed as part of ECM installation. You need to be comfortable with its accuracy and detail.

#### 3.4.4 Estimated Savings and Guaranteed Savings

The final proposal estimates the post-installation energy use, typically at the system level, even if whole-building M&V methods are to be used after commissioning. These estimates, like the baseline, are a key element of the savings calculations that will be part of the contract for its term and should be reviewed carefully for accuracy and reasonableness.

Energy savings are calculated by subtracting estimated post-retrofit energy use from baseline energy use. These savings calculations should be examined in detail, as they are the basis of the contractually guaranteed savings offered by the ESCO and they directly determine the investment and term allowed in the contract.

The estimated savings are derived from facility information and utility use data, using common engineering methods and calculations, documented in the proposal. Only a portion of the estimated energy savings are included in the guaranteed cost savings. The percentage of the estimated savings that is guaranteed by the ESCO depends upon a number of factors, such as whether the estimation of savings is generally conservative or aggressive; the M&V method — measured vs. stipulated savings; the degree of savings predictability and reliability for the ECMs; the O&M and R&R practices, the ESCO's risk tolerance, and agency preference.

ESCOs never guarantee 100% of estimated savings, principally because they always want to ensure that the guarantee will be met. The benefit to the agency of guaranteeing less than 100% is assurance that the guaranteed savings—the savings they are counting on to pay the ESCO—will be real. The safety net of guaranteeing less than 100% is also used to mitigate the uncertainty associated with using stipulated values in M&V. For example, where calculations can estimate an ECM's energy use with  $\pm$  10% accuracy, the ESCO can guarantee savings for that ECM based on the lower estimate of savings, and a less rigorous (less expensive) M&V method can be used with confidence.

#### 3.4.5 Management Plan

The management plan consists of the ESCO's organizational structure for the project, the Risk and Responsibility Matrix, the proposed level of O&M services, the proposed R&R services in detail, and a project timeline. In addition, the ESCO may furnish a Small Business Subcontracting Plan to outline their practices in hiring subcontractors, if required by the agency. Each of these components should be reviewed carefully, as they will become the contractual basis for the performance period of the contract. Be sure there is sufficient detail — consider someone reading this contract five years from now and trying to understand who is responsible for each piece of equipment.

The services outlined in the management plan and in the M&V section provide most of the backup and substantiation for the performance-period pricing shown in the financial schedules. Often there is considerable negotiation of the service levels since the investment in ECMs and the DO term are directly affected by the performance-period costs.

Consider the following review criteria:

- Project management approach and timeline are well suited for successful project implementation.
- Operations and maintenance plan addresses site requirements.
- Repair and replacement responsibilities address site requirements.

## 3.5 Knowledge Required for Effective Review of the Final Price Proposal

Careful review of final price proposal is key to assuring that the ESPC deal serves the best interests of the government.

Before agency staff can effectively evaluate the final price proposal, they need to understand the financial structure of ESPCs. The following sections discuss some of the required background information: the cost elements in ESPCs, the financial schedules in the delivery order, how the financing works, interest rates, assuring cost-effective financing, and finally, evaluating the final price proposal.

#### 3.5.1 Cost Elements in ESPCs

There are five types of cost elements in Super ESPCs:

- Project development Energy surveys, proposal development, etc.
- ECMs Direct costs for design, installation/construction
- ESCO's markup Indirect costs and profit
- Finance costs Interest and finance procurement price
- · Performance-period services

#### 3.5.2 The DO Schedules

The DO schedules comprise the final price proposal for the project. The final, negotiated DO schedules are included in the DO award, and detail the financial deal.

Blank DO schedules are provided in the Agency Project Binder.

The final price proposal includes the following:

- · Revised initial schedules DO-2, DO-3 and DO-4
- · Completed DO-1 (Final) and DO-5
- Supporting information on
  - Direct expenses for implementation
  - Performance-period expenses

The DO schedules are prepared in accordance with the instructions in Section H.24.2 of the IDIQ contract, "Format for Price Proposal." The ESCO revises its initial proposal schedules (DO-2, DO-3 and DO-4) for the final proposal. Schedules DO-1 (Final) and DO-5 are completed based on information obtained after the initial proposal.

The price proposal is required to include supporting information pertaining to direct expenses for project implementation and performance-period expenses shown in the DO schedules and included in the price proposal.

## 3.5.3 ESCO Markups and B Schedules

Schedules B-1 and B-2 contain the maximum markups on ECM prices and maximum markups (or "premiums") on finance charges. The markups include indirect costs and profit and were negotiated individually with each ESCO. These maximums apply to all delivery orders against the ESCO's contract, unless the B schedules are revised by the DOE CO through modification to the IDIQ contract. The B schedules appear as Attachment 3 of the IDIQ contract. Explanations of the schedules are included as notes on each schedule and in Section B of the contract.

ESCO markups may be negotiated down, but may not be over the maximums specified in the B schedules. The negotiated schedules are included in the DO award. Information on specific markups is available to agencies pursuing delivery orders on request to the DOE CO.

Sample B schedules are provided in the *Agency Project Binder*.

The legislation and DOE Rule at 10 CFR 436 exempt the Super ESPC delivery order awards from cost accounting standards and certified cost and pricing data requirements of FAR. The markup methodology for pricing indirect costs and profit was established as part of the Super ESPC IDIQ competition to accommodate the peculiarity of these awards. The exemption applies to both markups and support for direct costs.

DOE expected that Super ESPC projects would be of various size, complexity, risk level, etc., and have varying levels of indirect costs, and markups were set as maximums to be negotiated downward only. Markups were negotiated by technology category. Procurement history for both the DOD and DOE programs shows that this methodology works well, if the agency personnel avail themselves of their ability, by contract, to obtain all necessary supplementary information to support the direct, indirect, and profit components of the price proposed for their delivery order projects.

#### Financial Schedules in Price Proposals — DO Schedules and B Schedules

# DO-1 (Initial) — Proposed Guaranteed Annual Cost Savings and Annual Contractor Payments

Included as the ESCO's initial proposal for guaranteed cost savings and contractor payments for each year of the performance period, estimated based on the preliminary site survey.

#### DO-1 (Final) — Guaranteed Annual Cost Savings and Annual Contractor Payments

Final, negotiated schedule of guaranteed cost savings and contractor payments for each year of the performance period, based on the detailed energy survey and other information obtained after the initial proposal.

## DO-2 — Implementation Price by ECM

Details the costs of DES and proposal development and implementation and applies a markup not to exceed maximum values in schedule B-1 (see below) to derive the total implementation price for each ECM, each technology category, and for the overall delivery order.

## DO-3 — Performance-Period Cash Flow

Contractor's proposed cash flow for the performance period, including amounts financed, debt service, and itemized performance-period expenses. The markup applied to performance-period expenses may not exceed the maximum in schedule B-2. The interest rate on financing the project investment may not exceed the current like-term Treasury securities rate (or other financial index) plus the maximum premium given in schedule B-3 (see below).

DO-4 — First-Year Energy and Cost Savings by ECM, Technology Category, and DO ESCO's estimates of the energy and cost savings to be generated by the project, in support of the proposed guaranteed annual cost savings given in schedule DO-1.

## DO-5 — Annual Cancellation Ceiling Schedule

Required by ESPC-authorizing legislation. Shows outstanding capital investment and termination liability for each year of the contract. A negotiated monthly termination liability schedule is usually attached.

Schedules B-1 and B-2 identify maximum markups the ESCOs may add to implementation and performance-period expenses to derive total prices. Schedule B-3 identifies the maximum interest rate premiums over like-term Treasury Securities (or other index) that can be charged for project financing. These schedules (see IDIQ Section B and attachments) were negotiated individually for each ESCO and are included in each ESCO's prime contract. The maximums in the schedules are applicable to all delivery orders against the Super ESPCs, unless revised by DOE through modification to the ESCO's IDIQ contract.

Agencies are encouraged to negotiate markups and interest rates lower than the maximums identified in the B schedules, but the markups embedded in the DO schedules cannot exceed those in the B schedules.

## 3.5.4 DO-5, Annual Cancellation Ceiling Schedule

DO-5 Termination Cancellation Ceiling shows the total maximum outstanding liability of the agency for the awarded project for each year of the term and the corresponding outstanding capital portion of those ceilings. The DO-5 schedule is included because it is required by the ESPC legislation.

The ESCO's financier typically requires a monthly termination liability schedule to be included in the award along with DO-5. This is a loan amortization schedule that shows the amount owed the financier for each month in the performance period of the contract term. This schedule is negotiated and mutually agreed upon by the agency and ESCO. The monthly termination liability schedule corresponds to the annual amounts of outstanding capital investment on Schedule DO-5, and is typically attached to DO-5 in the award.

Termination for convenience clauses are contained in the IDIQ contract and apply as in any government contract. The DO-5 Termination Schedule does not override or in any way affect the termination process and settlement that would occur if a termination were necessary.

## 3.5.5 Understanding Private-Sector Financing of Super ESPC Projects

#### 3.5.5.1 Amount financed

The amount financed for a Super ESPC project includes

- project development expense, plus markup, for each ECM,
- implementation expense, plus markup, for each ECM, and
- financing procurement price (FPP)

The financed amount is decreased by

· any pre-performance-period payments

## 3.5.5.2 Financing Procurement Price

The FPP is a pass-through fee that includes no profit for the ESCO. The FPP includes costs for the following:

- Effort to arrange financing
- · Payment and performance bonds
- Capitalized construction-period interest
- Hedges to lock rates in advance of financial closings

Hedge costs may be included in the interest premium, or the finance procurement price, but not both.

#### 3.5.5.3 Financing Styles

There are two ways to structure Super ESPC financing, and some lenders model the project numbers in both ways to determine which is most advantageous to the customer. One of the principal differences between the two is that one allows the permanent financing to be placed on the award date, before construction begins, rather than at project acceptance.

ESCOs commonly obtain financing from a third party.

## Two Separate Loans: One for Construction and Another for Permanent Financing

The first style of financing involves two loans: one for construction, and a second loan for the permanent financing. The ESCO takes a short-term loan to fund construction, and draws down funds as construction milestones are met. This loan will usually have a relatively high interest rate, though interest is paid only on funds already drawn, instead of being paid on the full amount of the loan from day one. The construction loan is paid off by the permanent financing, which is placed at project acceptance.

A potential disadvantage of this financing style is that two loans generally involve two sets of loan processing costs. A more significant potential disadvantage is that structuring the financing in this way delays placement of the permanent financing until after the project is constructed and accepted, which may be a year or longer after DO award. Locking a financing rate for the permanent financing that far in advance requires expensive "hedges," which add significantly to the cost of the project.

## "Escrow Financing"

The option used most commonly by agencies is to place the permanent financing at the time of award (avoiding the need to lock an interest rate in advance), and placing the proceeds of the loan in an interest-bearing escrow account. The ESCO draws funds in stages, as milestones are met, just as if it were a short-term construction loan. Interest costs accrue on the permanent financing from day one, which makes the contract term longer, but some of that expense is recouped with the interest earned by the escrow account. This kind of financing is often less expensive than having two separate loans, because the customer pays for one set of closing costs instead of two and doesn't pay hedge costs to lock the interest rate in advance.

## 3.5.5.4 Performance-Period Payments

The agency's payments during the performance period come from the savings that result from the project. These payments cover:

- (1) Debt service (principal and interest) to lender, to repay financed amount, and
- (2) Payments to the ESCO for performance-period services, such as O&M, R&R, M&V, and training.

#### 3.5.5.5 Payment Options

**Annual-in-advance payments**. Agencies may make payments to the contractor on a schedule other than monthly. Making annual payments at the beginning of the year due instead of the end (or making quarterly payments at the start of the quarter) usually reduces interest costs.

**Unscheduled payments**. Some agencies have wanted to make additional payments, in addition to those required by Schedule DO-1 (Final) in the award, during the term of a delivery order, when savings in excess of the guarantee or other appropriate energy or energy-related funds become available. Making extra principal payments in this way on most home mortgages would reduce the term and the cost of the house. Unfortunately, ESPC loans are not analogous to home loans, and prepayment penalties that would negate any savings often apply. However, any reasonable payment schedule that suits the agency can generally be negotiated at the time of award.

**Utility rebates** may be factored into the project in a number of ways to reduce the ESCO investment, depending on the terms of the utility incentive. Incentives or rebates are not shown in the financial schedules if they are not payments by the agency to the ESCO.

#### 3.5.5.6 Pre-Performance-Period Payments (P4s)

The law and regulation for ESPC says that savings shall exceed payments in each year of the term. This language is considered by DOE to apply to the performance period of the term of the order, beginning with year one, after completion of construction, acceptance of the installation, and commencement of the guaranteed savings and payments from those savings. Preperformance-period payments (P4s) are permitted in an ESPC delivery order under certain circumstances that accommodate the intent of the law and regulation.

P4s must come from savings. Generally the savings that pay P4s are from avoided expenses due to the ESPC, or from savings that accrue from the ECMs during the construction period. For more on one-time savings, see the *Practical Guide to Savings and Payments*, sections 3.6, 4.4, and 5.5.

P4 amounts are shown in the year "zero" (construction period) of Schedule DO-1 (Final). P4s reduce the financed amount and the overall cost of the project.

## 3.5.5.7 Components of the Interest Rate: Index and Premium

The total annual interest rate for the financing has two components:

- (1) an index interest rate, and
- (2) a premium to cover the lender's costs.

#### The Index Interest Rate

The interest rate depends mostly on the prevailing cost of money in the financial marketplace, which is reflected in the index interest rate. The cost of money varies day to day. Financiers of Super ESPC projects generally lock in the permanent financing the day before award of the delivery order. The like-term index interest rate obtained for the project is whatever is available that day.

U.S. Treasury Securities are commonly used as the index because there is a large-volume, liquid market for them and historically they have been a stable indicator of the cost of money. There are 5-, 7-, 10-, 20-, and 30-year Treasury securities; lenders typically price to the like-term Treasury securities, interpolating if necessary, or to the one whose term is closest to the delivery order term. Other indexes can be used; whichever index is acceptable to all parties may be the reference index.

#### The Premium

A premium is added to the index interest rate to cover the lender's transaction costs, such as legal fees, administration, etc. The premium is usually measured in basis points — 100 basis point equals 1%. Most Super ESPC loan premiums have been in the range of 100 to 250 basis points.

Hedge costs to lock the interest rate in advance of financial closing on the loan may be included in the premium, or may be included in the financing procurement price, but not in both.

Maximum allowable premiums are given (by term and amount financed) in Schedule B-2 of the IDIQ contracts.

The premium also reflects any special risk in the project perceived by the lender.

## 3.5.5.8 The Lender's Perception of Risk

The lender evaluates the risk of financing a Super ESPC project based on the potential for the ESCO and the agency to carry out their obligations under the contract and the potential for anything to interfere with the government's obligation or willingness to pay the ESCO. The principal indicators are the following:

- The ESCO's creditworthiness
- The ESCO's track record
- Term of the loan (longer terms are more risky)
- Technical complexity of ECMs
- Technical risk in the project (level of M&V, technical complexity, etc.)

## 3.5.5.9 What can the government do to minimize interest rates?

The factors that have the biggest effect on interest rates are the index, the contract term, and the investment size. As a general rule, the interest rate increases slightly with term, because the underlying cost of money follows this relationship. Also, generally, larger investments carry lower interest rates because the fixed transaction costs such as legal fees, documentation preparation, and administration get spread over a larger base. The most important factors in interest rates are the creditworthiness of the ESCO, the amount financed, the term, and the date the financing is placed (which determines the index rate).

Agencies can take several steps to ensure that the interest rates on their projects are as low as possible:

- Require the ESCO to shop for the best interest rate get multiple offers.
- Investigate potential for P4s to reduce the amount financed: One-time savings from avoided expenditures, or construction-period savings.
- Minimize hedge costs: Consider using escrow financing; float construction or escrow rate until award
- Consider inclusion of specific contract clauses that would yield a lower interest rate.
- Consider annual-in-advance payments to shorten the term and lower total interest paid.
- Use a FEMP Project Facilitator. FEMP Project Facilitators have
  - extensive experience with Super ESPC financing
  - Access to comparisons with other Super ESPC awards
  - Capability to analyze the financial schedules to double-check the math and see that appropriate costs are entered where they should be
- Get further education from FEMP: Advanced ESPC and Financing

## 3.5.6 Evaluating the Price Proposal

Careful review of the final price proposal is essential to assuring the long-term value of your ESPC project. The negotiated schedules in the DO award comprise the financial deal.

The final price proposal includes:

- Revised initial schedules DO-2, DO-3 and DO-4,
- Completed DO-1 (Final) and DO-5, and
- supporting information on implementation expenses and performance-period expenses.

#### 3.5.6.1 Evaluation Factors

- Total implementation price for each ECM is substantiated through backup (including subcontractor quotes where appropriate) and is reasonable and consistent with the technical approach
- Performance-period expenses (for each line item) are substantiated through backup and are reasonable and consistent with the technical approach.
- Markups on the ECMs and finance premiums are within the maximum allowed under the IDIQ contract and are reasonable.
- The term of the DO is reasonable.
- The total proposed price is complete and reflects appropriate costs for project implementation.

A Price Evaluation Worksheet is provided in the *Agency Project Binder*. Using the worksheet is not a requirement in the Super ESPC process, but may be helpful.

## 3.6 Negotiation of Final Delivery Order

Negotiations to a final delivery order award have both informal and formal aspects. Informal negotiations are ongoing, beginning with the first kickoff meeting and continuing throughout the development of the final proposal, as the ESCO and agency discuss the project details and the agency's needs and preferences. Most of the issues regarding technical matters, such as ECMs, equipment, and selection of subcontractors, are generally settled in these informal, ongoing communications and are reflected in the proposal text. The agency and ESCO arrive at agreement over any remaining technical and price issues in negotiations led by the agency contracting officer. All agreements must be incorporated into the ESCO's proposal, the DO RFP, or both, in order to be considered binding.

After agreement is reached on the three technical components of the proposal — ECMs and energy savings, baseline and M&V plan, and management plan — the ESCO may need to revise some of the wording in the final proposal to clarify the agreements. At this point the DES can be considered as "accepted" and a letter may be sent to the ESCO acknowledging acceptance and requesting submittal of the additional required pre-award documents. Final price negotiations may still be ongoing at this point.

In many cases, by the time the agency contracting officer and ESCO sit down for formal, final negotiations, all parties are confident that no significant unresolved differences remain and that they are ready to sign the delivery order. Final negotiations result in agreement on all aspects of the offer including price.

#### 3.6.1 Updating the DO RFP for the Final Delivery Order

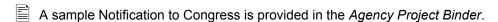
Since the DO RFP, together with the IDIQ contract and final proposal terms, comprises the scope DO award, and because the DO RFP overrides other terms and conditions, it is imperative that the DO RFP be updated from a solicitation document to one that reflects the final negotiated terms and conditions of the award. Any provision may be added, deleted, or changed as necessary at this point to reflect negotiations.

# 3.7 Confirmation that Pre-Award Requirements are Met by ESCO

The IDIQ defines several requirements that must be met by the ESCO before the delivery order is awarded. Completing the DES, revising the ECM feasibility analysis, delivering the revised/final proposal, and negotiating in good faith to a final accepted delivery order proposal are among these requirements. The ESCO must also provide evidence that financing and bonding (if required) are committed.

# 3.8 Notification to Congress if Cancellation Ceiling is over \$10 Million

The agency is required to notify Congress of an impending DO award at least 30 days before the award if the first-year cancellation ceiling in schedule DO-5 is over \$10 million. The advance notice gives Congress an interval in which to respond or comment if it so chooses, but no official response or explicit approval is needed before the delivery order may be awarded provided 30 days have elapsed since notification.



## 3.9 Award of Delivery Order

The agency contracting officer signs and awards the delivery order hopefully after obtaining the DOE CO's review of it. The delivery order award consists of the following:

- A face page
- DO price schedules [DO-1 (Final) and DO-5 are mandatory]
- The revised DO RFP (to reflect final settlement)
- The ESCO's final proposal (revised per negotiations)
- The ESCO's subcontracting plan, if applicable

The IDIQ contract is included by reference. The DOE CO needs to review only items 1-3 above.

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The agency notifies the DOE CO of the award and provides copies of the delivery order award.

# Phase 4. Implementation and Performance Period

#### Overview of Phase 4

The implementation period can be divided into three parts:

- Part 1. The ESCO's submittal of designs, equipment specifications, and design and construction package, and agency review and approval of the submittals
- Part 2. Installation/construction of the project, and agency inspection and acceptance of the project
- Part 3. Performance period through closeout

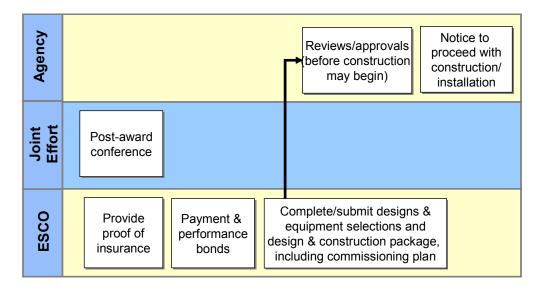
The final designs for the project are completed after the delivery order is awarded. The ESCO's submittals of their designs and plans become requirements of the contract after they are accepted by the agency, so careful review is imperative. However, liabilities associated with defects in design or materials remain with the ESCO.

The Contract Delivery and Reporting Requirements Checklist is used in tracking completion of the required submittals. A sample is provided in the *Agency Project Binder*.

Construction begins after acceptance of the ESCO's submittals. The agency's role during this stage of the project is to perform planned inspections to verify the progress as construction/installation milestones are reached, and to ensure that the ECMs are installed per delivery order specifications. Agency inspections do not relieve the ESCO of their role in overseeing the work of subcontractors and doing their own inspections in accordance with their quality control plan.

After agency acceptance of the installed/constructed project, the performance period starts. This is the payoff for all the agency's hard work. The invoicing and payment stream begins, M&V efforts continue (including reconciliation of savings), and at the end of the contract term the delivery order is closed out.

Phase 4, Part 1: Review and Approval of ESCO's Design & Construction Package



#### 4.1 Post-Award Conference

A post-award conference is recommended to cement the foundation for a strong working relationship between the ESCO and the government during implementation of the project. The objectives of the post-award conference are similar to those of earlier kickoff meetings — to establish roles, responsibilities, expectations, timelines, and communications protocols. At this stage the ESCO and the agency will also review details pertinent to the ECM installation, post-installation inspections, commissioning, training, acceptance, operations, maintenance, and other aspects of contract performance, and establish protocols for site access and the submittal review process.

A sample Post-Award Conference Agenda is provided in the Agency Project Binder.

#### 4.2 Proof of Insurance

The contractor submits proof of insurance within 15 days after DO award or acceptance of the design and construction package, after which the agency contracting officer issues a notice to proceed with design, and the ESCO begins the work specified in the delivery order.

## 4.3 ESCO Submittals and Agency Reviews and Approvals

## 4.3.1 ESCO's Designs and Equipment Selections

Details of the ESCO's designs, plans, and schedules must be approved before construction may begin. The processes for submittal and review of the ESCO's designs and equipment selections and orders are defined in the ESCO's proposal, per requirements for proposal contents in Section H.24.1 of the IDIQ contract, as supplemented by the DO RFP. The ESCO's submittals constitute requirements of the contract after approval by the agency, per IDIQ contract Section C.5.1. Designs, equipment, and design and construction package must conform to the standards given in Sections C.5.1 and C.5.2.

#### 4.3.2 ESCO's Design and Construction Package

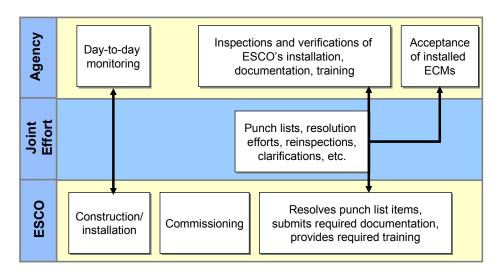
The ESCO submits the design and construction package, ECM quality control inspection program, and commissioning plan for all ECMs within the time frame specified in the proposal. The purpose of the design and construction package is to provide detailed information that allows the agency's contracting officer's representative to confirm that the ECMs will be installed in a manner that complies with contract requirements. The ECMs must be as described in the proposal and must meet the design and construction standards in the contract. The ECM quality control inspection program provides information the agency uses to schedule and conduct inspections of ECM installation. A commissioning plan for ECM testing and commissioning after installation is also included.

## 4.4 Payment and Performance Bonds

The CO must receive acceptable performance and payment bonds (as required) and any required insurance certificates before construction begins.

#### 4.5 Notice to Proceed with Installation

The agency contracting officer transmits a notice to proceed with ECM installation to the ESCO, indicating that construction may commence, after pre-award requirements are met. In addition to the required receipt of bonds and insurance certificates, the ESCO's design and construction package must be approved by the agency before construction begins.



Phase 4, Part 2: Installation/Construction and Project Acceptance

## 4.6 Installation and Construction

Before and during ECM installation, the ESCO provides the agency with required documents concerning installation procedures, such as a quality control plan, notification of work outside regular hours, planned utility outages, and ECM testing. The agency is responsible for monitoring the ESCO's progress during ECM installation to ensure that the work is proceeding as planned.

#### 4.6.1 Day-to-Day Monitoring of ESCO Performance

The Site Technical Representative performs day-to-day monitoring of delivery order implementation and is responsible for developing a surveillance plan that outlines the reporting tools and observation methods to be used to track and measure contractor performance. No particular format is required, but the plan should list the subjective and objective measures that will be used to assure timeliness and quality and to prevent cost overruns.

#### 4.6.2 Commissioning

Just as all aspects of baseline performance (energy use, conditioned space temperatures and humidity, light levels, etc.) were captured and documented during the DES and negotiated at award, similar data on the performance of the new equipment is gathered during commissioning. Commissioning is always done at the system level, and augmented with building energy use data if whole-building M&V methods are used.

Although the bulk of commissioning is usually done prior to acceptance, other performance checks may be required by the ESCO after agency acceptance of ECM installation. For example, chiller performance should be assessed in summer and steam trap performance during winter, regardless of when acceptance occurs.

#### 4.6.3 Inspections and Verifications

The ESCO holds primary responsibility for inspecting its own work and the work of its subcontractors. However, the agency must conduct oversight of the ESCO work and final inspections, and otherwise verify that the following required actions have been taken:

- Facility and energy baselines have been accurately defined
- The specified equipment has been installed (and installed properly)

- The ECMs as installed have the potential to generate the guaranteed savings (using commissioning, test and balance, and/or M&V data for confirmation)
- The ESCO has submitted all required documentation, such as post-installation M&V report, as-built drawings, a spare parts list, an O&M Plan, and training materials and schedules

#### 4.6.4 Changes and Modifications

Changes or modifications are less common with Super ESPC projects than with business-asusual contracting, but they are sometimes needed. It is difficult to anticipate all requirements, and additional information may surface during installation. Be prepared to deal with changes when they come up.

Some considerations in determining how to handle changes:

- Is the change within the current scope of the award, or outside of the scope?
- Is the change government-initiated or is it ESCO-initiated?
- Why is the change necessary?
- Should there be additional cost to the government, or should the ESCO bear the cost?
- Is a DO modification necessary? Immediately, or at installation completion?

Generally, if the change is needed because of an ESCO oversight (for example, if the ESCO missed a room within a building designated for lighting retrofits), the change should be borne by the ESCO with no charge to the government. If the change is due to the government adding a requirement (such as an additional building in a lighting upgrade), the cost accrues to the government. Some changes are at no cost or are exchanges of in-kind services or costs (for example, the addition of a small amount of lighting in exchange for a necessary two-month extension in construction time because of ESCO-caused delays in the project).

Generally all parties prefer to handle changes in ways that do not require renegotiation of the firm, fixed price [i.e., a revision to the payment stream in the DO-1 (Final) schedule] that might cause a corresponding effect on and renegotiation of the project financing.

Variances between design and installation are found on most projects. Details of the variations between the final proposal and as-built conditions are documented in the Post-Installation M&V Report, which includes energy impacts.

## 4.7 Acceptance of Completed Project Installation

The agency contracting officer's representative and CO indicate the agency's acceptance of the installed project via a letter to the ESCO, after confirming that

- installation has been accomplished as required,
- ECMs have the potential to generate the guaranteed cost savings,
- · required post-construction submittals are in hand, and
- · required training has been delivered.

The agency contracting officer's representative is responsible for

- · inspecting ECMs,
- developing punch lists,
- reinspecting to verify resolution so that the ECMs can be accepted, and
- reviewing, commenting on, and demanding revision of post-construction documentation until it meets contract requirements.

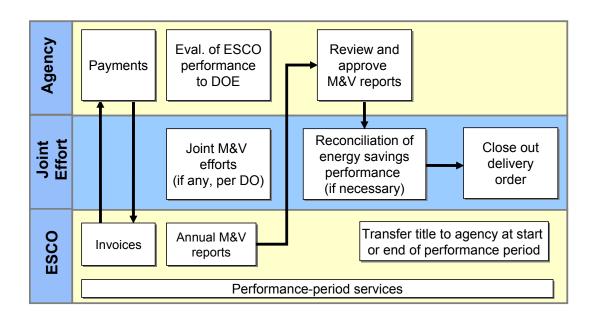
The ESCOs are generally highly motivated to resolve issues and achieve acceptance that all requirements of the contract have been met so that payments can begin.

The following is an informal checklist for agency acceptance of completed construction or installation. A sample of the checklist is provided in the *Agency Project Binder*.



- □ All ECMs have been installed.
- All ECMs have been through start-up, testing, and interactive commissioning.
- □ All discrepancies noted have been corrected.
- Appropriate training on operations and maintenance was conducted for each ECM.
- □ O &M manuals and procedures have been provided.
- Recommended spare parts lists and spares have been provided.
- As-built drawings have been received.
- □ Post-installation M&V set-up completed.
- Utility rebate inspections and paperwork approved and submitted.
- Manufacturer warranty and registration paperwork submitted.
- □ All ECMs have performed properly for 30 days as of \_\_\_\_\_.
- Government final inspection and acceptance is confirmed as of

(No earlier than date for the item shown above.)



# Phase 4, Part 3: Performance Period Through Closeout

# 4.8 Performance Period Through Closeout

#### 4.8.1 Invoices and Payments

Written notification from the agency to the ESCO confirming that the installation complies with the terms of the contract and has been accepted marks the point where the ESCO may submit invoices to the agency. Invoicing and payments can be done monthly, annually, or at other negotiated intervals. The agency is responsible for verifying that the monthly invoices contain any required M&V documentation before issuing payment. (Allowance for earlier invoice submittals is an agency CO decision. See IDIQ Section G.3.)

The commissioning and M&V activities should confirm the predicted post-retrofit performance, and hence the predicted energy savings, that were contractually agreed to in the DO. If the annual sum of all the ECM energy savings meets or exceeds the guaranteed savings and the other performance criteria are within specifications, the contractor payments can be made in accordance with the DO. If the annual sum total of measured ECM performance does not meet the total guaranteed savings, payments are not made unless and until this is resolved, unless negotiated contract provisions allow other remedies.

## 4.8.2 Performance-Period Services from Contractor and Agency Review

The ESCO provides the services specified in the delivery order during the performance period. These services may include O&M, periodic retraining of agency O&M staff, M&V, and others. The agency verifies that the ESCO is delivering the negotiated services.

## 4.8.3 ESCO Performance Evaluation for DOE

As of September 30, 2002, more than 85 delivery order awards had been issued against Super ESPCs. All contracting, energy management, and facilities/technical personnel who were

involved with the agency awards through September 30, 2001, were asked to complete a performance survey on the ESCOs with whom they worked. Survey results for each ESCO are made available to agency clients upon request. DOE now conducts these surveys annually and maintains such information for agency use. In addition, qualification sheets, including references, are also available from the DOE COR or CO at agency request. These two sets of documentation are a good first step for consideration of eligible ESCOs for project work.

#### 4.8.4 M&V

To verify and document that the guaranteed savings are being delivered, the ESCO (or other responsible party per the delivery order) carries out the M&V plan. The M&V plan establishes the schedules for site inspections and for specified measurements and monitoring, as well as the documentation required for periodic performance verifications. This documentation, referred to in the FEMP M&V Guideline as the "regular interval report," generally verifies continued operation and performance of the installed ECMs, quantifies associated energy savings, and demonstrates proper maintenance. The documentation is used to verify that the ESCO has delivered the guaranteed level of cost savings over the year.

The M&V Checklist in the M&V section of the *Agency Project Binder* details the required content of a periodic performance report.

The number and type of measurements and analyses performed in developing the annual M&V report are dictated by the M&V methods specified in the M&V Plan, and may comprise just a subset of data examined during commissioning and acceptance. In many cases the number of measurements may decline over time as trends emerge that can reliably indicate future performance. An annual site inspection or "energy audit" is mandated in the legislation authorizing ESPCs.

The agency is responsible for reviewing and approving the ESCO's annual M&V reports. It is recommended that the agency independently gather information for evaluating the reports by conducting spot checks of ECMs to identify potential deficiencies in performance or energy savings.

#### 4.8.5 Annual Reconciliation of Energy Savings Performance

If the actual annual savings, as determined by M&V, are less than the annual guaranteed savings amount, the ESCO must correct or resolve the situation or negotiate a change. Reconciliation of savings generally occurs annually. The guidance for reconciliation and the process for resolving disputes are specified in the IDIQ contract (as modified by the DO RFP).

#### 4.8.6 End of Contract Term and Closeout of Delivery Order

At the end of the contract term, the agency notifies the ESCO by letter that the performance period is over and payments cease.

#### 4.8.7 Title Transfer

The title may be held by the agency or the ESCO during the contract term, depending on which option is most advantageous to the economics of the project. Taxation, agency policies regarding real property holdings, or other factors may influence this decision. In any case, at acceptance of the installation or at the end of the contract term, title will be transferred to the agency. If the transfer occurs at the end of the contract term, it becomes part of the closeout process. Most agencies currently transfer title at acceptance of the installation and the initial M&V report, after confirmation of the guaranteed savings. DOE has developed DO RFP language for agencies taking title at the time of acceptance of the project installation, to replace the Section H.15 Title language in the contract, which leaves title with the ESCO through the entire delivery order term.